An Address
ON
THE PERILS AND COMPLICATIONS OF FIBROIDS AFTER THE MENOPAUSE.

Delivered before the Wimbledon and District Medical Society on May 8th, 1903,

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GENTLEMEN,—It was formerly taught and believed, even by thoughtful men, that uterine fibroids ceased to be troublesome with the cessation of menstruation. It is quite certain that a new chapter in their natural history requires to be written.

Uterine fibroids stand almost alone among tumours in the peculiarity of their age distribution, for they only arise during the menstrual period of life (from 15 to 45 years of age), but they stand absolutely alone among tumours in possessing another remarkable character. As a rule they cease to grow after the menopause and in some instances they undergo a marked diminution in size. Many writers are of opinion that they may even disappear. This must be a very exceptional phenomenon and hard to prove satisfactorily and upon which I have always entertained the gravest doubts.

The object of this communication is to discuss the complications of uterine fibroids after the menopause, for though, as a rule, they cease to grow after this event, they are frequently sources of great peril to life, not only in co-existing with other serious diseases of the uterus and ovaries, but the very fact that they are apt to diminish in size is in itself an occasional element of danger. Apart, however, from these conditions, the fibroids themselves are mainly sources of trouble on account of the degenerate and septic changes to which they are liable.

At the outset of this address it is essential to bear in mind that the presence of a fibroid in the uterus in a very large proportion of women has a very malicious influence in delaying the menopause. Many times I have removed fibroids from the uterus in patients between the fiftieth and sixtieth years of life in whom the monthly losses of blood were more profuse than at the age of 25 years. It is an important question whether the irregular and long maintained vaginal fluxes of blood in women with uterine fibroids after the fiftieth year of age should be regarded as menstruation in the proper acceptation of the term. On the other hand a woman may enter on the menopause at 42 or 45 years of age though a large fibroid may occupy the cavity of the uterus. In October, 1896, I removed from a woman, aged 45 years, a fibroid weighing 10 pounds sessile on the fundus of the uterus. She ceased to menstruate at the age of 42 years.[1] An early menopause under these conditions is about as rare as is a fibroid taking on rapid growth after the menopause. My earliest experience of this is very vivid in my mind, because it happened in the first patient on whom I performed hysterectomy with intraperitoneal treatment of the stump. The patient was a childless married woman, 48 years of age, who was known to have had a fibroid for nine years associated with metrorrhagia; in October, 1889, the catamenia ceased. Subsequently the tumour increased in size and became impacted in the pelvis and interfered with the rectum and I performed hysterectomy on March 12th, 1890, after a consultation with my colleagues and an understanding that the stump would be dropped into the pelvis.[2]

The fact that a fibroid may shrink after the menopause is in itself occasionally a source of danger, especially when pedunculated, for the tumour may be so big that its size prevents it from tumbling into the pelvis, but after the shrinking consequent on the menopause such a fibroid may fall into the true pelvis and become impacted. This, I admit, is a very rare complication, but it happens. In 1902 a patient, 55 years of age, who had her menopause at her forty-seventh year, was placed under my care in the Chelsea Hospital for Women for recurrent attacks of retention of urine due to a tumour of this kind. So long as the patient remained quiet she had no trouble, but a long walk, jolting in an omnibus, or running down stairs caused the tumour to fall into the true pelvis and to obstruct the urine; the patient would send for her medical attendant and he would push the tumour out of the pelvis and relieve the retention. At last the retention occurred so frequently that I was asked to remove the tumour; it was pedunculated, grew from the fundus of the uterus, and was equal in size to a turkey's egg and very hard. Since the operation she had remained free from retention of urine. Rare as complications of this kind undoubtedly are they are outdone on the score of rarity by the remarkable case recorded by Arnott. A maiden lady, aged 72 years, was knocked down by a large dog and fell forwards on the pavement; she died in 34 hours. At the necropsy a circular hole was found in a coil of ileum which lay between the anterior abdominal wall and a large calcified fibroid of the uterus.

Let us now deal with what I regard as the most frequent and the greatest danger connected with uterine fibroids after the menopause—viz., necrotic and septic changes. During the menstrual period of life fibroids generally possess an abundant supply of blood. In some instances they are so vascular that they are like huge cavernous angiomata, as those who have occasion to deal with them surgically know full well. In patients who retain their tumours till the menopause (and they are numerous) the cessation of menstruation is accompanied by a remarkable abatement in the blood-supply and the tumour ceases in many instances to grow, but the very fact that the nutritive irrigation, so to speak, of the tumour is arrested leads to degenerative changes and the fibroid becomes in many instances a dead sequestered body and so long as septic organisms are denied access it will remain inert; when from various causes putrefactive organisms gain access to these essentially dead tumours the results are often dire in the extreme.

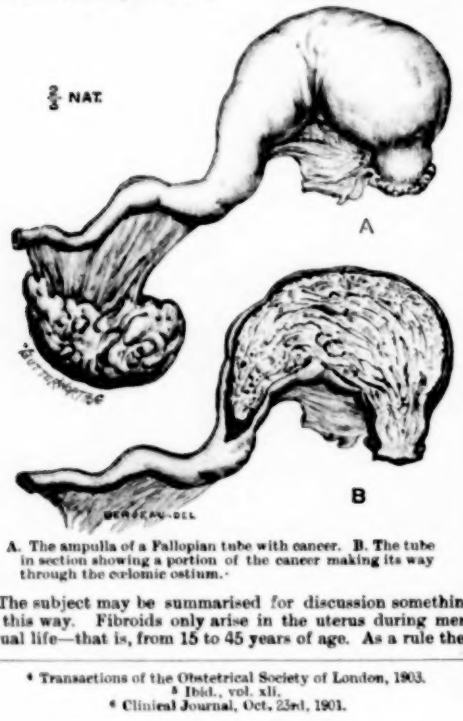
It is far easier to prove that putrefactive organisms do obtain access to these dying or dead fibroids than to tell how they get to them. There is, however, one mode of access which to my mind is undeniable. The fibroids which give rise to most trouble after the menopause are the submucous variety and there seems a strong tendency when the uterus passes into its resting stage and the fibroid is shrinking and dying for the organ to attempt the extrusion of the tumour. A careful study of the cases which have come under my observation shows that in the majority of troublesome post-menopause fibroids a large proportion of them have undergone partial extrusion or the mouth of the uterus is widely dilated and renders the ingress of germs an easy matter. It is, of course, desirable to furnish some facts as to the relative frequency with which fibroids become necrotic and septic after the menopause. For this purpose there are some records available of an extremely valuable kind.

Recently Dr. C. J. Cullingworth has published a useful paper on the surgical treatment of uterine fibroids in which he has particularly analysed the conditions which rendered operative interference necessary and in some imperative. Among 100 consecutive cases of this kind distributed between the twenty-third and sixty-first years of life ten of the patients had attained the fiftieth year and onwards. The changes in the fibroids in these elderly women were in all instances necrotic or septic in character. Subsequently Mrs. Scharlieb reported an analysis of 100 consecutive cases, their ages ranging from 18 to 68 years, carried out on Dr. Cullingworth's lines. Seven of the patients were over 50 years old. Mr. C. J. Bond of Leicester published a consecutive series of 50 cases in which hysterectomy was performed for fibroids. Four of his patients were 50 years old and upwards. The oldest patient on the list is noteworthy. She was operated upon for a fibroid in her fifty-sixth year, but she had her menopause at 40 years.[3] Dr. Lionel Provis, registrar to the Chelsea Hospital for Women, at my suggestion, made a list of 100 consecutive cases of operation for fibroids treated in this institution by the staff generally. The results are instructive. The youngest patient was 25 years of age and the oldest was 66 years of age, and of this number 11 of the patients were aged 50 years and upwards. The distribution is as follows: from 25 to 29 years, five operations; from 30 to 39 years, 37

[1] Transactions of the Obstetrical Society of London, 1897.
[2] Middlesex Hospital Reports, 1890.
[3] THE LANCET, Jan. 17th, 1903, p. 162.

operations; from 40 to 49 years, 47 operations; and from 50 to 66 years, 11 operations. The oldest patient in this particular series was aged 66 years and she had a very large septic submucous fibroid which had to be removed piecemeal. In 1902 I performed hysterectomy on a woman, 69 years of age, for a very large septic fibroid and an incarcerated ovarian cyst. The peritoneum had been infected through the left Fallopian tube before the operation and the patient died.[4] My oldest patient was 73 years of age and I removed a mass of fibroid weighing 28 pounds with success. The operation, which took place at the Middlesex Hospital, was a necessity because the tumour had become so cumbersome that she could not rest in bed.[5]

It will be clear to an impartial observer that even by fixing the menopause at the late age of 50 years uterine fibroids are very often sources of trouble, ill-health, and great peril to those who unfortunately possess them. One of the greatest perils which can happen to a woman with a fibroid in her uterus is to become pregnant, but after the forty-fifth year she is beset with a danger of quite another kind—namely, cancer of the endometrium. I have dealt with this serious subject so recently[6] that here I need only express it in the form of an aphorism. *When a woman with uterine fibroids has passed the menopause and begins to have irregular profuse uterine hæmorrhages it is extremely* probable that she has cancer of the body of the uterus. In a remarkable case of this kind under my care the patient had primary cancer of the Fallopian tube. Her case is fully recorded in the Transactions of the Obstetrical Society for 1902. She was a childless married woman, aged 57 years, and had her menopause at the age of 49 years. For many years she had suffered from what was regarded as a large fibroid tumour. Some months before coming under observation the patient complained of irregular, frequent, and rather abundant fluxes of blood from the vagina and this led me to suspect that the fibroid had become septic or that cancer had developed in the uterus. However, when an operation was performed I found the fibroid to be quite healthy, also the endometrium, but the ampulla of the left Fallopian tube contained a soft vascular tumour (*vide* illustration) which proved on microscopical examination to be a typical example of cancer and a portion of it had made its way through the cœlomic ostium of the tube and infected the peritoneum.



A. The ampulla of a Fallopian tube with cancer. B. The tube in section showing a portion of the cancer making its way through the cœlomic ostium.

The subject may be summarised for discussion something in this way. Fibroids only arise in the uterus during menstrual life—that is, from 15 to 45 years of age. As a rule they cease to grow after the menopause; after this event they may shrink. Some writers believe that they occasionally disappear, but this is very hard to prove and harder still to believe; therefore, as a concession to tradition, it may be described as a phenomenon about as rare as the advent of a comet. After the menopause fibroids sometimes grow and though an unusual condition it rests on the accurate observations of trained observers. Though a fibroid may cease to grow after the menopause it is still liable to extrusion from the uterus and gangrene with all its dangers and enmity to life.

Surely there is nothing in the whole range of surgery more ironical than a woman spending 20 or even 30 years of her life as a chronic invalid on account of a uterine fibroid in the expectation that at the menopause she will be restored to health and begin a new life and then to realise that far from this dream being fulfilled the fibroid becomes necrotic, extruded, or septic, and places her life in the gravest peril, and that she may die in spite of surgical intervention.

[4] Transactions of the Obstetrical Society of London, 1903.
[5] Ibid., vol. xli.
[6] Clinical Journal, Oct. 22nd, 1901.

A Lecture
ON
MENTAL UNSOUNDNESS AMOUNTING TO CERTIFIABLE INSANITY; AND ITS DIAGNOSIS.

Delivered at the Medical Graduates' College and Polyclinic on April 29th, 1903,

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GENTLEMEN,—The line of demarcation between sanity and insanity is an ill-defined one and the borderland province between the two is a narrow, uncertain, and variable territory. Its exact limitations are determined by the discretion and judgment of the certifying medical practitioner and the key of interpretation in this regard is in the hands of each one of you—who may be called upon at any time to use it. For the responsibility of this distinction heavy penalties—nay, even financial disaster—may be incurred, as in this country it is a serious matter to deprive an individual of his liberty and in an action of so serious an import the burden of proving insanity to the satisfaction of a non-expert British jury rests with the certifier. It is therefore well to remember that a medical man may be subject to an action at law on the part of any certified person who upon his discharge from the licensed house or asylum is entitled to a copy of the certificates and other documents upon which his alleged lunacy was based. Moreover, a medical man may be convicted of a misdemeanour if, in the words of the Act, he has made a wilful mis-statement in any medical or other certificate or in any statement or report of bodily or mental condition under the Act. It thus behoves every practitioner—even the youngest and most infallible—not only to exercise caution, vigilance, and due care in the recording of observations, the narrating of facts, and the deducing of conclusions necessary for the compilation of his certificate, but also that he should fortify himself with a sound—I will not say expert—knowledge of mental diseases so that he may with confidence discharge the responsibilities which the law imposes upon him in the practice of this branch of forensic medicine and thus be able to act with a readiness, accuracy, and precision which the possession of this knowledge implies.

Insanity has long since ceased to be looked upon as something mysterious or as a possession by evil spirits. It is nothing more or less than a disturbance of mind involving a disturbance of conduct—the former a sign and the latter a symptom of disturbed nerve processes. With every mental change it is probably without exception that some change occurs in the central nervous system. There is thus no mental state without its corresponding nervous state—"No psychosis without neurosis." What the relation and interdependence of mental to bodily condition may be is ton

explained and the principle of "psycho-physical parallelism" stands merely as a statement of fact and not as an explanation. To suggest or to imply causation on the material or on the immaterial side is unjustifiable. By the term "mind" I do not mean as ordinarily that mind connotes something spiritual or material which lies behind the particular manifestations of mental life—anything metaphysical or mysterious behind mental processes. I use the term "mind" to refer to the sum total of mental processes which are experienced during a lifetime and in its psychological sense to imply feelings, impulses, and ideas. Another term frequently referred to in the explication of mental diseases is "consciousness." In my remarks the term is taken to imply the sum total of mental processes which make up *present* experience—the actual NOW. An acquaintance with the elements of psychology affords considerable assistance to the student of mental problems, for it enables him to analyse concrete or actual mental experience into its simplest components, to discover how these combine and by what laws, and also to bring them into connexion with their physiological or bodily conditions.

It is well known that the cerebral cortex is the most vascular tissue in the body and it is therefore natural to seek for important changes indicating insanity in the intricate nutritive plexus of the cerebral blood-vessels and the part of the brain mantle supplied by this plexus. The microscopic appearance of the brain after gross dementia seems to point out that the number and size of the cells in the second layer of the cortex vary in direct relation to the amount of dementia, and we may assume that the morbid anatomy of the cells of the forebrain—the prosencephalon—is closely connected with disturbances of mind. But hitherto pathology has not illumined the relationship of mind and matter nor has it enabled us to do more than merely assert that when there is brain disease there also is mental disease. We have no pathological classification of insanity, and, broadly but erroneously, we can only state that insanity is a symptom-complex which may be due to an inflammation of the brain and its membranes, to a brain injury, a brain defect, a malnutrition, or to a reflex disturbance, and that the symptom-complex is nothing more or less than an excess, a deficiency, or a perversion of normal mental processes. The pathology of insanity throws absolutely no light upon the pure and primary psychoses and no changes in the brain have been discovered or described as in any way characteristic of, or corresponding to, the changes in consciousness which are observed to occur, after death by chloroform or alcohol or after such drugs as strychnia, conium, morphia, &c., or in connexion with such diseases as tetanus, hydrophobia, &c., in which marked mental as well as physical symptoms are known to occur. Indeed, it is not improbable that many of the changes which have been described in the cortical cells as indications of insanity either represent gross dissociations of nerve molecules which may occur at the moment of death or are artefacts due to the manipulation of the investigator and are in no sense indicative of morbid appearances. The finer changes, which, though compatible with life, are still sufficient to produce mental disturbance, remain undiscovered and up to the present we must remain content with such platitudes as that "the brain is the organ of mind," that it is "the mirror of the outer world" or more abstrusely and equally vague that "mind is force oscillating in the protoplasm of the cell," without in any way throwing light upon the nature of the parallelism which is our hypothesis. The fact therefore remains that positive observation on which to base a pathological classification of insanity is still a desideratum. As to a classification not based upon pathology, which is from a scientific point of view both arbitrary and artificial, there is consolation, if not satisfaction, that we have one based upon symptoms which, after all, is practical, which can meet the everyday requirements of the practising physician, and which is in the main what concerns us to-day.

At the present moment there are probably no less than 110,000 certified insane persons in England and Wales alone, of whom approximately about 50,000 are males and 60,000 are females. There are probably also for every certified male lunatic two other persons who, by heredity and predisposition, are on the borderland between sanity and insanity and from whose ranks are recruited the majority of cases of "occurring" insanity. According to the division of insane persons into private and pauper classes do patients require either two or one medical certificate for their detention, and as there are in England and Wales about 23,000 registered medical men and women each medical practitioner has the responsibility at his own door—if an average were taken—of having deprived at least four persons of their liberty and franchise. Not that this has been unnecessarily or unjustifiably effected. In all probability, nay, in all certitude, this deprivation of freedom has been both necessary and justifiable, not only for the good of the patient, the interest of his property, and the safety of his family, but also for that of society at large.

In order fully to estimate the import of mental unsoundness with a view to certification we have to bear in mind that the standard of mental health is a variable one and that not only have the symptoms presented by the individual to be considered but also his relation to the world in which he exists and in which he is maintained. In the brief time at my disposal I can do no more than merely hint at or indicate the varieties and degrees of mental unsoundness which may prove of assistance to the medical practitioner in his estimate of certifiable insanity and I will consider two points: firstly, what symptoms constitute mental unsoundness or insanity; and, secondly, the consideration of these symptoms so that we may be able to analyse the essential nature of the insanity of which the symptoms are but evidence.

In the latter analysis we shall consider not only the primary psychoses but also those forms of insanity which occur in association with the great neuroses—epilepsy, hysteria, and chorea—as well as those cases of dementia which fall to the lot of the neurologist and which are due to coarse formative lesions, such as are induced by neoplasms (specific, innocent, and malignant), parasites, special toxins, meningitis and those due to vascular changes, thrombosis, embolism, hæmorrhages, softening, sclerosis, &c. It is acknowledged that certain mental states have certain bodily conditions as almost invariable accompaniments and no inconsiderable assistance to diagnosis is obtained from these, to which we shall refer later.

Firstly, as to what constitutes mental unsoundness or insanity. Delusions have been considered both by the lay as well as the legal mind to be the essential characteristic, and although this departure from normal mental health often finds the readiest expression by the patient himself, and although also it offers the greatest superficial contrast between sanity and insanity, the presence of illusions, hallucinations, or delusions, although strong indications, are not absolute signs of insanity. Joan of Arc, Peter the Great, Warren Hastings, and a host of eminent men and women have been under the influence of hallucinations and delusions in which they believed and which they cherished, yet they have been able to carry out all or most of their particular duties in life.

In the development of the individual certain instincts deeply implanted in man's nature and characteristic of him are gradually evolved. These relate, firstly, to his own support, his search for food, his retention of animal heat, and his self-preservation by security from attack and his capacity for self-defence; and secondly, to his instinct of reproduction and the support and care of his young by means of which his species is perpetuated. In the course of his physical and mental growth certain reverses or checks are liable to occur to the instincts named, to his perception of the various impressions which reach him from the outer world, or to the power which he has of interpreting these impressions and associating them together. When these reversions or checks, acting through circumstances from without or causes from within, affect his perceptions or his interpretation of perceptions we have the cause of illusions and hallucinations and when they affect the power of discrimination—the power he has of using old facts in new circumstances by discerning their agreement or disagreement—we have arising hence the elements of delusions; indeed, one form of insanity—paranoia—is looked upon as a pure reversion—an anthropological degeneration in an atavistic sense to an ancestral type in which the mysterious forces or powers of nature are often personified to give an explanation of the delusions, the belief being entertained that nature in some occult way and with occult power acts upon the human organism.

In the discussion of insanity the standard of mental health is, as stated, a variable one, and what would indicate insanity in a person of previously high intellectual power and culture would not indicate insanity in members of a lower order or an inferior race. The beliefs which were creeds and in consonance with those of an early period of

history would to-day, in members of a civilised race, rank as insane delusions. The disordered perceptions which were interpreted as the result of supernatural influences in the Middle Ages are to-day referred to telephonic influences or those of Marconigrams, or the propaganda of secret societies. The religious exaltation and fanaticism such as occurred in the Tudor and Stuart periods, and the revivalist excitement which occurred during the closing years of the eighteenth century and which were then looked upon as natural and healthy, would now be looked upon as unsuitable and improper if not insane. Probably in years to come the perfervid ebullitions which were described as "Mafficking" will be looked upon as beyond the bounds of physiological limits. Social circumstances, again, mould the ideas of individuals, for political movements, war, assassination, elections all have their reflection, travesty, or caricature in the delusions of the insane; and the present regard for constitutional monarchies, the emancipation from superstition through the growth of science, art, the press, &c., cause emperors, prophets, and virgins to be superseded by inventors, journalists, and scientific project makers. Furthermore age is a controlling factor. There is a wide departure from a normal standard of mental health in the life of the ordinary individual, for childhood is characterised by a fantastic tendency, a fascinating unreality and irresponsibility; youth has about it a prodigality of romance which is in direct contrast to the conservatism, the lethargy, and often the miserly suspiciousness of old age. But if the vagaries of youth manifest themselves without inhibition and control in adult age and so alter conduct, that which was normal becomes out of place and might constitute *primâ facie* an indication of insanity.

Delusions *per se* do not constitute insanity. The varieties of febrile delirium due to causes such as pneumonia, malaria, enteric and other toxins do not constitute insanity. The abnormal mental states caused by acute alcoholism or the administration of such drugs as cannabis indica, and those mental symptoms caused by hysteria, chorea, asthma, nervous shock and injury, or even epilepsy, do not constitute insanity except in their remote consequences, for they are generally of the foolish, shallow, and unreasonable type and are more in the way of a vivid dream than the creative and mobile delirium of insanity. Certain forms of mental abstraction or concentration, giving rise to eccentricity which may be familiar among one's own friends, do not constitute insanity. Neither are illusions and hallucinations absolute indications of insanity. Pepper's ghost was indulged in as a self-deception. The spectre of the Brocken is appreciated as a natural phenomenon. The double images of diplopia, the zigzag fortifications of migraine, the capriform images of scotomata, the photopsia of ocular abnormalities, entotic sounds, and the references of sensory disturbances to amputated toes and fingers are all illusions, hallucinations, and delusions, but they do not constitute insanity. The symptoms in all these are different in degree and character from the auditory hallucinations, the heavenly visions, the noisome smells, and the poisonous tastes characteristic of the expansiveness of mania, the delusions and the paretic symptoms of the general paralytic or the states of stupor met with in well-known forms of mental disease. Illusions and hallucinations to be insane must be *subjectively real* and delusions to be insane ideas must be consonant and in harmony with the age of the person, with his former conduct, with the period in which he lives, with his circumstances and surroundings, with the class of society to which he belongs and the educational influences under which he has been nurtured and brought up.

In order to obtain the full import of delusions and that they may be considered to have a diagnostic value they are regarded either as ambitious or persecutory or as expansive or depressed, the state of the individual's health not infrequently determining this, the emotional state overwhelming his reason, a predominantly painful emotion depressing him and presenting this to his reason he is convinced in the belief that he must be a bad man and that he was a bad man because he had committed the unpardonable sin, whilst an explanation as to why he committed this, how, or what it may be is not forthcoming. The formal content of the delusions has also been considered to be of importance, the division being as follows:—1. Those relating to sex—not in an animal sense—but in regard to that "Schwärmerei," the feeling of idealism for others which fills up his day-dreams and which discovers in some imaginary personage—often in a higher and more exalted circle than his own—the incorporation of his ideal, weaving into a romance any accidental resemblance he may find about the adored one. 2. Those relating to politics or high affairs of State which often lend much colour to exalted delusions. 3. Those relating to religion, which betray themselves in conduct by a tendency to develop devotional attitudes, to frequent public places of worship to the exclusion of personal and public duties, or to engage in engrossing conversations in regard to the Virgin, God, the Messiah, &c. 4. Those relating to special bodily conditions and probably caused by the paræsthesias or dysæsthesias characteristic of certain bodily conditions. It is well known that the guise of the conceptions in delusions is not independent of sensorial impressions, for cases of tabes with active sclerosis of the posterior columns often refer the peripheral sensations to electrical or magnetic disturbances, the girdle sensations to red-hot irons or unseen agencies, and grey optic atrophy may give rise to visual illusions. I am disposed to consider that more information as to diagnosis and prognosis in regard to delusions may be obtained from the way in which these have arisen and are nurtured by the patient—i.e., from the synthesis rather than the analysis—whether these delusions are systematised or whether they are unsystematised rather than from the nature of their content—although some information may be gathered from a grouping on the basis of content, those delusions, for instance, which relate to religious and sexual life being often connected with epilepsy and those relating to marital infidelity or to mutilation, persecution, and visual hallucinations being related to alcohol. The systematisation of delusions indicates a slow growth, a process of reflection and a period of chronicity. Such delusions reflect the special type of the insanity of which they are a manifestation. They are elaborately but superficially justified by a *show of reason*, although the person cannot give the actual reason for his belief as a sane man would and cannot argue logically upon his belief nor react normally to it. Moreover, he cannot correct his perceptions by the same evidence of the senses in the way the sane man does.

Thus delusions, whether systematised or not, are not a sufficient indication of mental unsoundness. What then is? It is the action which is but evidence of the delusion and which again is a symptom of the cerebral fault which permits its development. *It is conduct*, and conduct such as is in contrast with a man's previous life, such as is unsuitable to his circumstances, his status and his surroundings, such also as interferes with, impairs, or jeopardises the liberty, property, and self-respect of others and which arouses the expressed suspicion of his relatives or those who have known him. For instance, the language and levity of a music-hall performer would be viewed as insanity in the conduct of an episcopal dignitary. The portly tradesman who instead of serving his customers played leapfrog over his counter would be looked upon as mad. The Member of Parliament who flew a kite on the terrace of the House of Commons instead of introducing his long-expected Bill, or the wealthy possessor of property who denied himself the necessaries of life or who outraged decency by casting off his clothes on the public highways,—all these are instances of a want of adaptation to environment, of an absence of the fitness of things, showing a lack of reasoning power, of proper understanding, and of responsibility which in each case indicates mental unsoundness. Such acts of conduct demonstrate a failure to coördinate impressions of mind—although, as already indicated, it is not all perversion of mind which amounts to actual insanity.

As to the actual change in conduct which amounts to insanity we return to the developmental instincts already referred to and to those self-preservative and indirectly self-preservative instincts such as the search for food and those relating to sex. It is a perversion of these two main instinctive tendencies of the human race which form the basis and which actually yield the chief forms of mental disease. A direct reversal of the great law of self-preservation is illustrated in the suicidal tendencies which may at times among a people almost assume an epidemic of insanity. Morbid propensities by suggestion or by the influence of an impressive spectacle may become imperative conceptions dominating conduct and being beyond the normal control of reason. Such obsessions, more common in females and more frequent in imbecile youths, are by no means rare in the families of neurotic parents. The various "phobias" are illustrations of these—pyro-, klepto-, dipso-, &c. When relating to the sexes abnormalities such as nymphomania, satyriasis, and "Lesbian" love are more often dealt with by the law as a vice rather

than treated by the law as a disease. Perversions which occur at the physiological crises—at nubility, puberty, adolescence, pregnancy (with that destructive tendency exemplified in puerperal infanticide), and senility—all illustrate abnormalities, checks, or reversals in development. As the altruistic virtues are the highest developed these in insanity are the first to undergo reversal. The courtesies, conventions, and ceremonies of social life undergo a change and the change is always in the direction of degradation. The conduct tends to become selfish and a common feature is for the attributes of anything, however trivial or however great, to be brought into some relation to himself, and although there is but little intellectual change observed in some cases I maintain from a somewhat long and extensive experience that it is still there.

As to the relationship of insanity to the great neuroses it is accepted that they are interchangeable and experience demonstrates that chorea, epilepsy, or drunkenness in the ancestor may become actual insanity in the descendant.

Much has been said in regard to the somatic relations of insanity. The brain is the organ of the body as well as of the mind and in insanity marked physical changes occur which may indicate insanity or coexist with it or which may be indications of a transmitted or acquired constitutional taint. The trophic disturbances, such as muscular wasting in certain cases of melancholia, hæmatomata as of the ear, the rapid and extensive decubitus which occurs in paretic dementia or cases of acute delirious mania, herpetic eruptions, pigmentary changes, premature greyness, or irregular blanching of such tissues as the hair and skin, may all be observed in cases of insanity. There are no doubt gross vaso-motor and trophic disturbances provoked by the diseased condition of the brain, but visceral diseases generally are accidental factors and the patient would probably be insane with or without them. Visceral lesions would not provoke a delusion in a healthy brain. I have seen two cases of ovariotomy in excitable and hysterical women without any mental improvement. The condition of the skin as to dryness, secretion, &c., certainly changes in acute mental states, as probably do those of the glandular secretions, which thus favour malassimilation and malnutrition. There is no elevation or reduction of temperature accompanying insanity unless in the acute delirious or some toxic phases and it is not pathognomonic of these. The urine in many acute cases shows an excess of phosphates and urates. The condition of the retina does not, except in cases of general paresis and locomotor ataxia, afford any diagnostic help. The disc changes in syphilis and renal or heart disease are only collateral signs. Much has been written about blood dyscrasia in insanity but apart from the presence of cholin during and after the seizures of paretic dementia there are no special diagnostic helps in regard to immunisation, agglutination, or cyto-diagnosis for the general practitioner. Instruments of precision such as the sphygmometer and the sphygmograph do not afford special help to the uninitiated. The sensory and motor systems, however, are replete with signs: the innervation of the facial muscles, the state of the handwriting, the tremor of the voice, and ocular phenomena on the motor side; and anæsthesia, analgesia, paræsthesia, &c., on the sensory side appear and not infrequently before any mental symptoms. If these be present they are strong indications of the early stages of general paralysis or of coarse focal lesions of the brain due to various causes already enunciated. On the other hand, if they follow mental symptoms they are apt to be greatly masked by the dementia or the restlessness, indeed, it may be quite impossible to determine the condition of sensibility in those persons with marked delusions—a state of things which has led to the comment that sensory disturbances in the insane concern the physiologist rather than the practical physician.

Having pointed out certain bodily symptoms or accompaniments of insanity and having determined insanity to be a change of conduct either as regards the individual himself or in respect to his environment, we have now left to us the practical application of our clinical classification which, as there are no well-known pathological states underlying insanity, is the simplest and most profitable plan of classification. The first distinction is between those cases in which the insanity is directly produced—mania and melancholia—and is the most important disorder manifested by the patient, a form designated as pure insanity or primary psychosis—the "psycho-neurosis" of Krafft-Ebing—which is without demonstrable organic changes of the brain and without those degenerative forms due to inherited taint, and which form is in the main curable. Speaking generally, and for non-experts, exaltation of emotion and intellect is described as "mania," depression as "melancholia," whereas the terminal stages of weakened intellect are described under the term "dementia." General paralysis is a disease *sui generis* and epilepsy is a neurosis with a special form of mental disturbance accompanying it. To be able to describe and to define facts broadly indicating insanity observed by oneself may not be easy, and even when insanity is diagnosed it may not be easy to carry conviction to the friends. Not only is it necessary to diagnose insanity, but the question will have to be met as to what is best to be done in regard to treatment. This will depend upon a proper appreciation of the symptoms upon which alone a satisfactory diagnosis can be based. The following remarks may be of assistance. When a case is presented one must notice the expression, the features, and the manner. These and the first words spoken, if the patient is communicative, may give much guidance. Allow the patient to speak on without interruption or asking leading questions. Notice the dress or surroundings, for peculiarities of costume may serve to reveal marked morbid projects. The pockets of the dress may bring out compromising documents relating to morbid ideas; indeed, written records carried about the person, as in cases of monomania, bring out the nature of the insanity much better than any verbal inquiry; and the rubbish such as stones, grass, bits of string, and scraps of paper collected by the paretic dement may be very characteristic of the insanity. Fibrillary tremor of the tongue or a lateral deviation may prove of significance and may augur general paralysis, alcoholic insanity, or that due to vascular lesions. The disturbance of sleep may offer assistance, for it may be troubled by hallucinations, common again in alcoholic insanity. Family or business troubles may reveal conspiracies so common in monomania or paranoia, or there may be suspicion of marital infidelity, as in alcoholic insanity, or unfounded self-accusations, such as the commission of a crime, as in cases of melancholia. Suspiciousness or distrust causes the patient to deny his delusions, but a prolonged examination will often evoke delusions. Occasionally the patient apprehends the nature of his own symptoms, and although he may be convinced of his own insanity, yet he is most desirous of not having it revealed and suicidal attempts may occur if he is, as he may be, conscious of his loss of mental power and struggles hopelessly against it. In many cases affection for relatives is changed. This occurs in the acuter varieties of mania and the delusional forms of melancholia. In the affective insanities, the pure psychoses—simple mania and simple melancholia—there may be an absence of delusions, pure depression occurring in the latter, and excitement or restlessness (an extreme mobility of ideas with marked unrest) in the former. The delusions of acute mania are not, as a rule, dangerous; the delusions are too unsystematised and fleeting and they follow on in such rapid succession that action upon them is impossible The delusions of chronic delusional insanity, on the other hand, especially of the persecutory character, are most dangerous, and it is true as maintained that every paranoiac is a potential homicide. It is well if possible to verify the delusions of the alleged lunatic as there may be a basis for the suspected false belief, although in most cases the insanity of an idea may often be gleaned from its inherent construction. It is well also to collate all, even the most trivial, observations which relatives and friends may make in regard to the previous and present history before the examination is made, so that such facts may be confirmed and utilised or discarded. The previous history affords factors in etiology which may greatly assist in prognosis and treatment—e.g., pregnancy, the puerperal period, malnutrition, toxins, &c. There is, as a rule, no difficulty when the patient is communicative or is violent and dangerous; in these circumstances the practitioner knows how to act.

If, on the other hand, the patient is not communicative, but is, on the contrary, passive and quiet, amounting to almost absolute mutism, then one may have to deal with phases of stuporous insanity; if there have been previous similar attacks the case is probably one of periodic melancholia; or if depression and excitement alternate then it is one of circular insanity. Simple melancholia is perhaps the commonest form of passivity but general paralysis may commence with depression and motor inactivity. In general paralysis, however, the mental rank or grade is,

as a rule, higher and there is in the early stages an irritability in small matters, an apathy, or a peculiar abstraction, a forgetfulness or tendency to sleep and to be dull with a lack of will power in regard to important events and matters of business. The latter has often been communicated to me by the relatives as common in cases of general paralysis. Physical symptoms evinced by headache, tremor of facial muscles and tongue, of the speech and the handwriting, also occur, the knee-jerks are increased (or possibly in tabetic cases absent), and pupil phenomena (noted in the Argyll-Robertson reaction) confirm the diagnosis of general paralysis. Age has certain controlling influences as already stated. The mental condition of coarse brain lesions is that of dementia and it is accompanied by physical signs according to the locality affected. It is this form which is familiar to the neurologist.

The mental state in association with epilepsy is recognisable by the peculiarly dull appearance of the patient not unlike that of slight drunkenness or of alcoholism, but the delusions if present are religious and sexual. There is a record of previous fits, the symptoms come on suddenly, but there may be marked fury or excitement which is uncontrollable, or there may be a state of more or less prolonged, dreamy, dull consciousness described by Crichton Browne. The mental condition associated with hysteria is of a superficial, changeable, and emotional character with a tendency to foolish mendacity and sexual ideas. That associated with chorea may in pregnant women be of very serious import. As a rule mild dementia accompanies chorea more often than mania or melancholia. Almost all alcoholic forms are characterised by the presence of hallucinations, which are often visual and mostly terrifying, by the presence of fixed delusions of a persecutory nature such as those of poisoning or mutilation; there is also marked amnesia of a special kind. The tremors, absent knee-jerks, and frequent morning sickness may help diagnosis in respect of alcoholic insanity. In some cases of mania there is a prodromal period of depression which is not easy to diagnose from primary dementia, only that explosions usually follow in mania and loss of memory in dementia.

In cases presenting motor excitement it is necessary to determine whether this be due to epilepsy, simple mania, or the maniacal phases of general paralysis. As general paralysis occurs in from 12 to 20 per cent. of all cases of insanity and as it is a disease of mature adult male life and one in which syphilis is a precursor, as also it is one in which dangerous excitement occurs and there is lavish prodigality of means and the disease is incurable, it is necessary to form an early and accurate diagnosis so that removal under care may be effected. It is best for the patient that he should linger out his days in a comparatively felicitous existence, unconscious of his fatal malady, such as may be secured in an asylum.

In conclusion, therefore, when a case of mental unsoundness as defined by our hypothesis is presented to us, we have to consider the import of delusions not only as to their content but also as to their systematisation, the question of psychical weakness in the abstract, abnormal irritability, defect or perversion of will power, and changes in the emotional states; confident that we are doing right by the patient in sequestrating him from managing himself or his affairs if he is suffering from the acute form of any variety of insanity, for all such are potential suicides—if he is suffering from confirmed systematised delusions of a persecutory character, for all such paranoiacs are potential homicides—if he is suffering from the early symptoms of general paralysis or if there are great violence, noise, excitement, and sexual trouble—and that we are doing right by not certifying if the insanity is in a young person of either sex, is due to toxins, or is of a mild or subacute and temporary variety.

Claybury Asylum, Woodford.

THE ROYAL NAVAL NURSING SERVICE.—On Friday, May 29th, Her Majesty the Queen presented badges to two head sisters and 22 nursing sisters of Queen Alexandra's Royal Naval Nursing Service at Buckingham Palace. Rear-Admiral John Durnford, C.B., D.S.O., a Naval Lord of the Admiralty, Inspector-General Sir Henry F. Norbury, K.C.B., K.H.S., R.N., Director-General of the Medical Department, and Staff Surgeon W. J. Colborne, R.N., Assistant to the Director-General, also attended and had the honour of being presented to Her Majesty.

Clinical Remarks

ON

THE TREATMENT OF GANGRENOUS HERNIÆ BY ENTERECTOMY.[1]

Delivered at University College Hospital in February, 1903,

BY ARTHUR E. BARKER, F.R.C.S. ENG.,

PROFESSOR OF THE PRINCIPLES AND PRACTICE OF SURGERY AT UNIVERSITY COLLEGE AND SURGEON TO UNIVERSITY COLLEGE HOSPITAL.

GENTLEMEN,—Some time ago I gave you a few facts as to the results obtained in this hospital from the treatment of strangulated hernia, either by taxis or operation, in 406 consecutive cases (*vide* THE LANCET, May 30th, p. 1495). Certain conclusions seemed justifiable from this study, and above all that the mode of dealing with gangrenous hernia hitherto adopted appears to require modification at the present day. The question what to do in a case of gangrenous hernia is one the seriousness of which is well known to all surgeons of experience, and the factors which make such a case grave are also now fairly well recognised. They have been worked out by the anatomist, the bacteriologist, and the pathological chemist. In a given case, say, of gangrenous femoral hernia we have the following elements of danger: (1) the gut is destroyed by necrosis over a greater or less surface and therefore it cannot be returned into the abdomen; (2) the dead portion is septic in the highest degree; (3) the fluid of the sac, if there be any, is highly septic and may run back into the abdomen and infect it if the constriction has been divided before the sac has been well cleansed; and (4) the condition of things within the abdomen is also fraught with risk. Here the gut above the constriction is loaded with retained fæcal matter which is virulent in proportion to the time it has been pent up in a stagnant condition. The bowel is distended by this fluid, often to an enormous extent, and it is paralysed owing to causes unnecessary to trace for the present. But not only is it distended and paralysed but its structure is in many cases much altered. Its mucous membrane is inflamed, or even ulcerated (*vide* Case 3 below), from the point obstructed upwards, *often for some feet*. The submucosa and muscular coat are œdematous and the serous covering is sodden and discoloured from extravasation of blood; it may also be flecked with patches of lymph either on its free surface or in its subserous layers. In this condition it is now well known that the bowel, although its continuity is unbroken, can no longer offer much resistance to the passage through its walls of septic organisms and sooner or later these transude and set up a septic peritonitis. This has been long known of the bowel caught in the sac. But it is now clear that the same infection will take place sooner or later within the abdomen from the unbroken bowel above the constriction if the evacuation of the retained fermenting fæces be not provided for. Probably a certain amount of toxic exudation from the obstructed bowel is tolerated by the peritoneum as long as it is sound and is removed by its lymphatics, but the time comes when it is not removed and peritonitis is set up.

But beside these dangers the patient has probably been exhausted by vomiting and inadequate feeding for days. The vomited matter has been foul and in many cases it has been inhaled in fluid or vapour form into the lungs with more or less damage to them. Moreover, the patient has been confined to the recumbent position and the bases of the lungs may have been imperfectly expanded owing to the position and the painful condition in the abdomen and so have become œdematous, rendering them particularly vulnerable to infection. Again, the toxins stored up in the bowel above the constriction are absorbed and exert a depressing effect upon the whole economy.

Now it is in these retained contents of the bowel above the constriction and in their local and general toxic effects

[1] We have thought it best to publish this lecture in immediate sequence to that published last week, as though delivered at some distance of time apart the two are practically different portions of the same subject.—ED. L.

that the main danger of strangulation with or without mortification lies. Their irritating properties have been known ever since the artificial anus has been made for their evacuation in gangrenous hernia. The rapid production of excoriation or even ulceration of the skin around such an opening bears witness to their acrid nature. Again, the facts so often noted in former times when herniæ were more frequently reduced by taxis alone than now point in the same direction. We have all seen many such cases attacked after reduction by severe diarrhœa with blood-stained stools and other evidence of acute enteritis often terminating in death. The cause here has been explained to be the rapid rush of the pent-up toxic fluid into the empty and starved intestine below the constriction, setting up there an acute inflammation continuous with the inflamed and sodden tract above. Again, how often have we seen in the days of frequent taxis a patient die from peritonitis starting from the sodden but still unperforated loop returned into the abdomen or from pneumonia combined with moderate enteritis or peritonitis (*vide* Table II.[2]). But in addition to all this the bacteriological examinations of the fluids retained above the constriction made within the last few years by a number of observers have amply demonstrated its virulence and the chemical analyses its toxicity. Cushing's bacteriological studies on the swarming life found in the first discharge from an artificial anus for gangrene and the gradual disappearance of the bacteria as evacuation of the contents proceeded show this most fully.

Now all this and the bad results of the earlier *primary* resections for gangrene have gradually led to the conclusion held by the majority of surgeons at the present day, that, in the words of Cushing, quoted here as one of the most recent and thoughtful writers on the subject and one of the most progressive surgeons, "If the gut is not viable experience has shown that the immediate establishment of an intestinal fistula is much the safest procedure, as this permits the immediate escape of the retained toxic products from the proximal bowel." Again, lower down: "Occasions doubtless arise when an immediate anastomosis can be made, but under ordinary circumstances I believe it is preferable, as stated above, to establish an artificial anus and allow all the contents of the bowel to be rapidly evacuated." But that the ultimate result in such cases is not generally good even in his hands may be inferred from the following lines in the same publication: "The cases with gangrenous bowel present a more difficult problem. With only two or three exceptions at this hospital (the Johns Hopkins) such conditions have led to a fatal termination. On one occasion Dr. Bloodgood resected and sutured a gangrenous bowel in a young man under general anæsthesia with recovery." The experience at University College Hospital bears out this statement. I find that in a series of years reaching down to date out of 20 consecutive cases of the formation of an artificial anus for gangrene only two ultimately recovered.

But in spite of this dismal experience the rule is still followed to day by most surgeons that in cases of gangrene of the gut the safest thing to do is to make an artificial anus. And yet notwithstanding the wide acceptance of this rule I venture to think that the time has come for its modification. My own experience based upon the last ten or 12 cases of gangrenous or greatly damaged intestine which I have had to treat has forced me to the conclusion that this rule, however sound in the past perhaps, is not so applicable at the present day.

Let me define my position a little more clearly. It seems to me that for those cases of gangrenous bowel in broken-down individuals who have been neglected or badly treated and who come to us almost moribund the rule must still hold good. Any long operation, and above all any prolonged general anæsthesia, will almost certainly be followed by death. The formation of an artificial anus, on the other hand, in these cases is easily and rapidly done under local anæsthesia and offers the patients the best if slender chance of recovery.

But in those instances in which our patients reach us in tolerably good *general* condition, although the state of the intestine is hopeless, I venture to think that a *wide-reaching* resection of the bowel offers the best prospect of recovery. Such cases come to us nowadays, I think, as a matter of observation in relatively greater numbers. The delay on the part of the public is less in seeking operative aid, and the pernicious practice of drenching these patients day after day with purgatives is less widespread than formerly. The previous treatment before they are handed over to the surgeon may still be dilatory, but it is more usual now to find that such cases have been placed under opium and the application of ice with occasional attempts at taxis. But, at any rate, they have been spared the constant forcing of the bowel under the stimulus of purgatives and the consequently increased stercoraceous vomiting. And though the local condition of the bowel is as hopeless as before, they are more frequently in a better *general* state than formerly. This, at least, is my experience in a fairly large number of cases. And it has led me to the following conclusions.

1. The most imminent danger to the patient with a greatly damaged or actually gangrenous loop of intestine *lies in the condition of the bowel for the three or four feet above the constriction.* If this is simply put back or an artificial anus made the risks are enormous. In either case it only *slowly* relieves itself, in the first instance by passing on its toxic contents into healthy bowel below, there to be more or less absorbed with the further production of enteritis and toxæmia, and in the last by slowly discharging on the surface of the body. It must not be forgotten that this evacuation will be *slow*, for the distended and sodden bowel is in a state of paralysis often for days after the relief is given. In the meantime the patient is on his back with all the risks of pneumonia, toxæmia, and peritonitis.

2. In a case where the patient is in a reasonably good condition I cannot help thinking that to excise this dangerous portion of paralysed and sodden or ulcerated gut *en bloc* together with all its virulent contents is relatively the safest course. At one sweep the three or four feet of gut with pints of toxic material can be cleanly removed. And, moreover, by dividing the gut high up we get a portion less widely dilated and therefore more easily adapted to the contracted lower tube. But this last is not the crux of the situation, for of course we might make a lateral anastomosis. The great point is to remove at once *the contents as well as the diseased bowel* and to make our suture junction in relatively sound and clean gut. It may be objected that this demands a large and long operation and consequently a great strain on a feeble patient. But this is only relatively true in these days of improved technique and is balanced, I think, by the enormous gain to the patient of having a veritable "cesspool" removed from the abdomen cleanly and with it most of the really damaged and dangerous bowel, leaving the part above where there is less paresis or none and where our stitches will hold in sound tissue. But the excision *must be wide.* On this point we need have but little misgiving as far as the general nutrition of the body is concerned. It was pointed out years ago by Senn that in dogs at least one-third of the whole intestinal tract may be removed without any damage to the economy. Since then, in many cases six, seven, or even eight feet of the human small intestine have been removed successfully and without any injury to the general health.[3] If this be so and if, as I venture to think—indeed, it is almost certain—that the risks of gangrene of the intestine depend upon the conditions not only in the dead loop but in the three or four feet of gut above the point of constriction, there need be no hesitation on the ground of doubts as to the general future nutrition in removing any length of intestine up to some six or seven feet. Further, it may be pointed out that in only one particular does it take longer to excise six feet than it does to remove six inches. This is in the treatment of the divided mesentery. But I think that I can demonstrate a method by which the latter can be dealt with rapidly and effectively. Of course, the anastomosis of the actual ends can be made as quickly when several feet have been removed as when only a few inches have been resected and (if the respective lumina are in the former case more alike in size) even more rapidly.

The first case in which the above line of reasoning appeared to lead me to a successful result may now be mentioned briefly as it has already been fully recorded.[4]

CASE 1.—A young man, aged 20 years, was admitted into University College Hospital in July, 1899, for an inguinal hernia of moderate size but distinctly gangrenous after four days' strangulation. Instead of making an artificial anus according to rule with a prospect of secondary anastomosis I drew down the afferent limb of the loop until healthy bowel was reached. The mesentery was clamped and stitched, the

[2] THE LANCET, May 30th, 1903, p. 1486.

[3] Vide author's paper in THE LANCET of April 27th, 1901, p. 1186 containing the bibliography of the subject.

[4] Brit. Med. Jour., Dec. 23rd, 1899.

bowel was divided, and the nearly equal lumina were anastomosed end to end (method described below). A radical cure by Bassini's method followed at once. Recovery was uneventful. The portion of gut removed measured three feet.

CASE 2.—The next case[5] was that of a woman, aged 46 years, with a gangrenous femoral hernia of three days' standing. Here the procedure was the same, but only one and a half feet were removed and the sac was drained with gauze for a few days. Recovery was without a hitch.

CASE 3.—The third case[6] was still more to the point and convinced me that extensive tracts of small intestine can be rapidly removed with no more shock to patients than short. And further, that with the removal of the over-filled, engorged, and ulcerated proximal loop, one of the great dangers was at once eliminated which are so potent in such cases. The patient, a feeble woman, aged 76 years, was admitted into University College Hospital on Jan. 10th, 1901. For two years she had had a large ventral hernia in the scar of an ovariotomy performed 30 years before—in 1870. On Jan. 8th and 9th she had not felt well and had had pain in the abdomen but no sickness. At 10 A.M. on the 10th the patient was seized with severe pain in the abdomen and vomited bile-stained fluid. The large tumour was swollen and tender; no more flatus was passed and she became faint. Later in the day she had another attack of faintness and sickness and brought up undigested bacon. Her state on admission is thus described in the hospital notes: "Feeble woman with intermittent pulse of 108; face pinched, tongue moist; condition but for age good." At 10 P.M. I operated and on opening the thin scar about one pint of dark, evil-smelling fluid gushed out of the sac. About three feet of strangulated gut were then found constricted by a strand of omentum at the neck of the sac. It had not quite lost its lustre but it was very black, foul, and distended with sanious fluid and its recovery seemed hopeless. I at once measured off with my fingers what was roughly estimated as about six feet (really it turned out to be five feet six inches). At all events I ran it through my fingers until a part was reached above which seemed to be sound enough to retain sutures and to furnish healthy plastic lymph. The mesentery was then clamped and sutured (see below) and the bowel was cut away from it. End-to-end anastomosis by suture followed and the abdomen was closed. The junction was completed in 44 minutes after the beginning of the operation. The last stitch closing the abdomen was finished within 63 minutes from the first cut. There was no shock, a very remarkable fact in the case of such a feeble old woman, and the patient was induced to sit up the next day and afterwards, and as a rule, only to lie down for sleep. I had her placed in an arm-chair by the fireside on the sixth day. The wound was found to be perfectly healed at the first dressing on the tenth day. Except for a trace of bronchitis and a little diarrhœa from the fourth to the seventh day recovery was uneventful. She presented herself at the hospital more than a year after operation in the best of health.

The surgical registrar's report on the parts removed is specially interesting here.

> Five and a half feet of small intestine: three inches from the lower end is the seat of the distal constriction. The gut at this spot becomes intensely congested and hæmorrhagic, of a purple-black colour, and its walls are thickened with intense œdema. At the time of the operation there was a definite groove at this spot which has now disappeared after lying in weak spirit for 12 hours. On tracing the gut upwards from this point the first three feet are all intensely congested, thickened, and œdematous, but the changes become less marked above, and the upper two feet, though now only pale and œdematous, were congested at the time of the operation. There is no groove or sudden change in the pathological appearances to mark the seat of any constriction of the proximal loop of gut, the congestion and œdema becoming gradually less when followed up the gut. On slitting up the gut the mucous membrane of the lowest three feet has a deep purple-black colour and the valvulæ conniventes are so swollen, discoloured, and pulpy-looking that it is difficult to say whether any ulceration exists. After lying some days in weak formalin the parts merely congested became paler and revealed three large patches in the last 18 inches of the gut where the mucosa was hæmorrhagic, partly gangrenous, and superficially eroded. Each patch involved the whole circumference for about three inches and the lowest, where the changes were most marked, had a definite abrupt linear border marking the seat of the distal constriction. In the next foot of the gut above there were two similar but smaller patches of mucous hæmorrhage and erosion only involving a part of the circumference of the bowel for about one inch by half an inch.

This condition of the bowel confirmed my belief that had it been returned into the abdomen whether *with* or *without* the formation of an artificial anus and with all its acrid contents which had already fouled the effusion in the sac nothing could have saved the patient. My only doubt for some days was whether I had removed enough of the bowel to secure a sound material capable of reparative energy for the anastomosis. But, at all events, the whole of the ulcerated portion with the large quantity of toxic material both within its lumen and infiltrating its walls had been removed and there was no evidence in the after history, except a little diarrhœa, that any dangerous amount had been left behind.

If anything was needed to strengthen the conclusion that the removal of large tracts of intestine above a gangrenous portion is desirable it appeared to be furnished by this case, and the absence of shock, even in so old and feeble a woman, seemed to prove that the removal of so much gut is not *necessarily* a severe strain, even upon a feeble patient.

In another recent successful case of a similar kind now to be briefly recorded I had, looking back at the last, no hesitation as to the course to be pursued.

CASE 4.—A woman, aged 52 years, was admitted into University College Hospital on Feb. 7th, 1903, at 1.30 A.M. with a left femoral hernia strangulated since the previous Monday (Feb. 2nd). There had been stercoraceous vomiting for the last two days. The patient was placid and in fair condition. The pulse was 72 and the temperature was 99° F. Coils of greatly distended intestine could be seen moving under the abdominal walls. After washing out the stomach and administration of chloroform lightly the sac was opened, the gut drawn down, and the constricted part found to be grey and gangrenous; in fact, it leaked on being handled and the destruction of the two inner coats could be felt between the finger and thumb. Both limbs of the coil were tied firmly above the constricted portion and the loop was cut away. With the threads used thus a strip of sterile gauze was tied over the cut ends previously well washed with normal saline solution. The abdomen was then opened in the middle line and the proximal and distal limbs were caught in the fingers and drawn from the neck of the sac and out of the abdominal wound followed by the gauze. The proximal loop of the bowel, measuring about two inches in diameter, was very largely distended with dark fluid and deeply congested for several feet. The mesentery was clamped (see below) and ligatured close to the bowel which was then cut away from it to the extent of over six feet with all its foul contents. (Be it remembered that a cylindrical tube two inches across will contain for every foot over one pint.) End-to-end anastomosis was then attempted, as in the other cases, but when nearly completed was found to be unsound owing to the difference of calibre. The portion sutured was therefore cut away and a lateral anastomosis was made higher up and the abdomen closed. The femoral wound was then sutured in the usual way. All this consumed more time (two and a quarter hours) than I like to think of—just double the time spent over the last operation mentioned above. But as the procedure included two enterectomies and a femoral herniotomy and was complicated by a tendency to bleed from the mesentery this is not so surprising. There was no shock and recovery was uneventful except for 13 loose stools within the first week and a little discharge from the femoral wound and from one stitch in the abdominal incision.

I should now like to sketch in outline the procedure I have adopted in these and the last five or six cases.[7] It differs in many respects from those which are commonly described and aims at saving time, securing accuracy of adjustment, and the elimination of undue manipulation with possibly tainted fingers.

When the gangrenous or extensively damaged loop has been drawn well out of the abdominal cavity, as in the last two cases, as far as the points to be divided the wound is packed with one end of a long roll of sterilised gauze, none of which can thereby be lost in the abdomen.

The first point, then, is to select the spot at which the distal and proximal ends of the damaged loop are to be divided, the first some two or three inches below the constriction and the other at any distance above it up to six or seven feet which may be considered to have reached sound bowel. Here the two portions are placed accurately side by side in their long axes and are clamped together firmly with one (first) pair of Doyen's forceps. Next the damaged loop is stretched to its full length so that each half of the mesentery is evenly applied to the other half. The two halves of this structure are then firmly clamped together

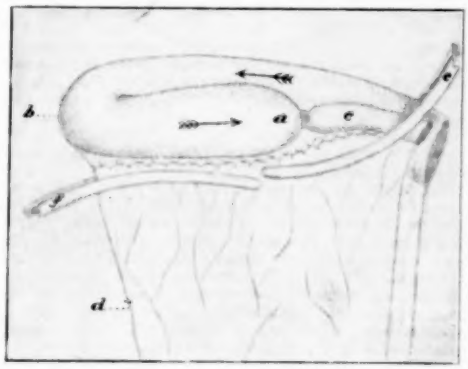
[5] Ibid.

[6] THE LANCET, April 27th, 1901, p. 1186.

[7] Ibid.

with a second Doyen's forceps placed parallel to, and about one inch from, the bowel (Fig. 1). Another Doyen's forceps is now made to close on the rest of the two leaves of the mesentery if it is too long to be included in one pair. The forceps can start from the point of the

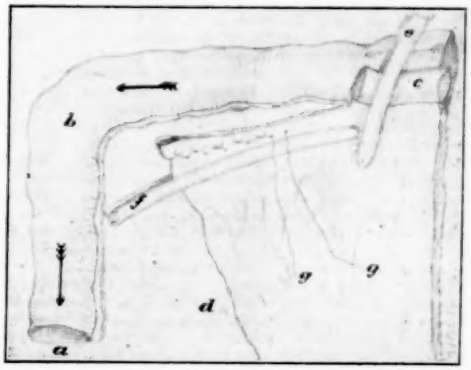
FIG. 1.



a, Constriction. *b*, Proximal distended gut. *c*, Distal contracted gut. *d*, Mesentery. *e*, Doyen's clamp on both loops. *f*, Doyen's clamp on mesentery. The folded loop here represented is for convenience of drawing only a short one.

second pair, one blade being pushed through the two folds of the mesentery, and should close the latter up to the point at which the two limbs are held together in the first pair used to keep the two limbs of the gut together. This latter pair if now removed and is placed only on the distal portion at the same spot (Fig. 2). Another is

FIG. 2.

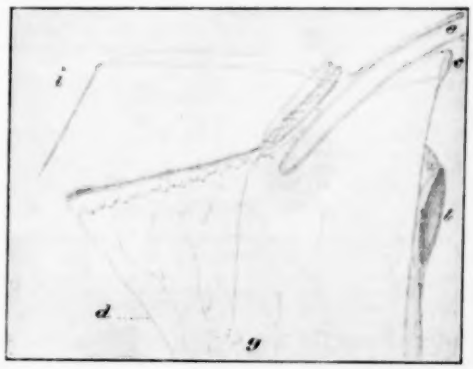


a, Constriction supposed to be open in a basin on the floor. *b*, Proximal distended limb going to basin. *c*, Distal limb clamped. *d*, Mesentery partly tied off. *e*, Doyen's clamp closing distal limb. *f*, Doyen's clamp holding folded mesentery. *g*, Threads tying both layers of mesentery.

placed about half an inch more distally and between the two the gut, previously packed with gauze, is divided. The whole of the bowel still closed by forceps is now cut away from the mesentery round to the point opposite the forceps on the distal limb (Fig. 2). The piece of bowel thus freed at one end and in its whole length is left hanging out of the abdomen over the edge of the table (Fig. 2) into a basin and then the forceps closing its end is removed, allowing the contents to escape into the basin and draining the bowel both outside and inside the abdomen. While the latter process is going on the two halves of the mesentery are stitched together laterally by strong threads passed through them from side to side between the clamps and the cut edges, all being tied on one side and including about two-thirds of an inch of mesentery in each ligature (Fig. 2). This closes the hole in the mesentery and at the same time the vessels going to the edges cut away from the bowel. All this time the contents of the bowel are running off into the basin on the floor. The anastomosis now remains to be made. But before the junction is begun the distended gut within the abdomen can be further unloaded by pressure on the abdominal walls and by drawing the coils if necessary through the fingers with a kind of "milking" action until their contents flow off into the basin below. The advantage of thus unloading the bowel cannot be overrated, and though I did not carry it out in the last case exactly as described I had so planned it for some time.

The junction of the two ends was done in all my last cases as follows. The clamped distal portion and the unclamped proximal, now empty and more or less reduced in size, were laid side by side in such a position that while their attached mesenteric margins corresponded at one point the axes of the two portions crossed one another obliquely. When now both were included in one pair of Doyen's forceps at the point at which their mesenteric borders crossed, their free margins also corresponded by the greater obliquity of the smaller bowel. In other words, when they came to be cut off flush with this forceps more was cut away from the free margin of the smaller bowel than from the proximal tube (Fig. 3) which was divided only a little obliquely.

FIG. 3.



a Of previous figure has been cut away. *b*, Proximal distended limb. *c*, Distal limb clamped obliquely to latter. *d*, Mesentery stitched and cut from bowel. *e*, Clamp holding two limbs together. *g*, Tail thread of suture uniting ends through all coats. *i*, Sewing needle and thread *in situ* closing part of cut ends.

The two tubes thus held together side by side in one forceps are again clamped nearer the abdomen by another pair as close as possible to the first and then being carefully packed with sterile gauze are cut with a knife or scissors flush with the distal edge of the first pair of forceps. The freed long coil of intestine and the stump of the distal end held in the forceps applied earlier in the operation now drop off and the gauze packing is changed. Then the forceps at the edges of the approximated tubes is removed, the second pair being left on with the cut edges previously clamped in the first projecting about a third of an inch beyond it (Fig. 3).

Now commencing at the mesenteric border, the adjacent edges of the two tubes are stitched together with a continuous suture, taking up *all* their coats until the free margins are reached. Here the corner is turned and the opposite edges are similarly stitched until the suture reaches the mesenteric margins again and can be tied with the tail thread at the starting point (Fig. 3, *g*). Another forceps is then made to clamp both tubes three or four inches nearer the abdomen and the forceps holding them together for the first row of suturing is taken off. This enables the operator to place another line of continuous suture over the first and folding it in. This second row should, of course, take up only the serous, muscular, and fascial layer under the latter, avoiding the mucosa. When this has been carried quite round the

bowel and has been tied to the tail thread at the starting point on the mesentery the anastomosis is complete and the forceps higher up is removed. The whole area of operation is now washed with sterile saline solution, especially the anastomosed portion of gut. The latter is then replaced in good position in the abdomen and this is closed with sutures. A pint of normal saline solution may be injected under the skin of the arm towards the axilla and five minims of solution of strychnine hypodermically. All other means for keeping up the patient's vitality, such as warmth and a rectal injection of brandy, are, of course, followed. And besides this I have long made it a practice to encourage such patients to spend all their waking hours in the sitting posture and only to lie down for sleep. This helps in preventing hypostatic pneumonia, as also probably does an occasional thorough rubbing over the back and bases of the lungs. In my oldest patient, aged 76 years, it has been mentioned that she was lifted out of bed to an armchair by the fireside on the sixth day with manifest advantage.

Since I began to employ this method of procedure in 1899 I have done seven enterectomies for gangrenous herniæ. Of these five have recovered. One of the fatal cases died from obstruction due to an old fibrous band pressing on the bowel after its return; the other case did well for several days and then slowly developed peritonitis, starting from the remains of the infected sac which I had unfortunately not drained and which having contained the cæcum was difficult to shut off by suture from the abdominal cavity. There was no failure of any kind at the seat of the anastomosis.[a]

These results, I feel, justify the hope that primary enterectomy may often take the place of the formation of an artificial anus in gangrenous hernia if the principle of *excising a large tract* of damaged gut above the constriction is followed for the reasons given above.

ON THE RELATION EXISTING BETWEEN URIC ACID EXCRETION AND THE BREAKING DOWN OF THE WHITE CORPUSCLES.[1]

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THE important fact that uric acid can under certain conditions be experimentally produced from the white blood corpuscles was first observed by Horbaczewski.[2] Following his research the relation of uric acid excretion to leucocytosis has been worked at by many writers from the clinical standpoint; among these Kühnau[3] and Richter[4] in Germany, Douglas[5] in this country, and Zarnier,[6] Giajmis,[7] and Reale[8] in Italy may be mentioned. If it be true that uric acid is formed from the white corpuscles, the fact is to be explained by its production from the nuclein contained in these cells, either as a result of their destruction or in consequence of their metabolism. The conclusions arrived at by the above-mentioned observers have, when definite, been by no means in agreement. Kühnau, in an extensive and careful research, showed that, following the crisis of lobar pneumonia, at which period there is an increased destruction of the white cells, there is an increase in the daily amount of uric acid excreted. Making observations in various other diseases he found that following a decrease in the leucocyte count there is in most cases a corresponding increase in the daily amount of excretion of uric acid, an increase which he considers is caused by the increase in destruction of the white blood corpuscles. He further showed that in leucocythæmia, in which condition the number of white cells in the blood is largely increased, the daily excretion of uric acid is also markedly increased.

With regard to his observations showing a rise in the amount of excretion of uric acid following a fall in the leucocyte curve, I would point out that the latter may be referable not to an increased destruction of leucocytes but simply to a diminished production. As regards his researches in leucocythæmia, Milroy and Malcolm[9] have shown that in medullary as well as in lymphatic leukæmia, and Hale White and Hopkins[10] have demonstrated that in medullary leukæmia, the daily amount of excretion of phosphoric acid is diminished, so that the increased amount of uric acid excreted in these diseases can hardly be ascribed to an increase in the breaking down of the white corpuscles. The other observers mentioned (with the exception of Richter who lays stress on the importance of making observations extending over a considerable period of time) contented themselves with making in each case at most two or three observations on consecutive days of the numbers of white cells in the blood and comparing these with the amounts of uric acid excreted on the same days. Now inasmuch as the physiological amount of the daily excretion of uric acid varies for different individuals within wide limits (between 0·2 gramme and 1·5 grammes) it is obvious that the amount excreted in a particular individual under pathological conditions may be very largely increased without this amount exceeding these limits. It would seem to follow from this that observations of the ratio between the average amount of the daily excretion of uric acid and the average number of white corpuscles in the blood in a particular case are of less value than consecutive observations in the same case, showing alterations in the one side by side with alterations in the other. It must be confessed that, apart from Horbaczewski's experimental work, the only convincing observations as to uric acid being formed from the white blood corpuscles are those of Kühnau on pneumonia.

My object in making the observations which are recorded below has been to determine in pathological conditions the times in each case observed at which an increased destruction of white cells is taking place, and to notice whether this is followed by an increase in the amount of the daily excretion of uric acid. With this end in view daily observations were made of the number of white corpuscles in the blood for many consecutive days, whilst corresponding daily estimations of the total amount of uric acid excreted in the urine in the 24 hours were also performed. It is fairly obvious that in any condition such as advanced pulmonary tuberculosis, in which there is a leucocytosis for a considerable period of time, there must be associated with this (always assuming that the leucocytes concerned are not specially long lived forms) an increase in the amount of the daily destruction of the white cells. When I refer below to increased destruction (as evidenced by certain alterations in the differential count to be presently explained) it must be understood that I mean an increase in the amount of destruction of the white cells over and above what has just previously been taking place (i.e., a relative increase in the breaking down of the white blood corpuscles). In order to prove that a rise

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[a] Since the above was written I have successfully operated on an eighth case of gangrenous hernia and excised the necrosed portion, consisting of a strangulated Meckel's diverticulum.

[1] A thesis read at Cambridge for the degree of M.D.; also read before the Pathological Society of London.

[2] J. Horbaczewski: Untersuchungen über die Entstehung der Harnsaure im Saugethierorganismus. Wien Sitzungsbericht, Band 96, Abtheilung iii., S. 301. Also Sitzungsbericht der Königlichen Akademie der Wissenschaften Math. Naturw. Cl., Wien, 1889, Band xcviii., pp. 301-318. Also Sitzungsbericht der Königlichen Akademie der Wissenschaften, 1890; Band 48, 1891; Band c., 1892. Also Beiträge zur Kenntniss der Bildung von Harnsaure und der Xanthinbasen, sowie der Entstehung der Leucocyten im Saugethierorganismus, Monatschrift für Chemie, Band 12, pp. 221-275. c. confr. J. Horbaczewski, Zur Theorie der Harnsaurebildung im Saugethierorganismus, Wiesbaden, J. F. Bergmann, 1892.

[3] W. Kühnau: Zeitschrift für Klinische Medicin, 1895, vol. xxviii., p. 534. Experimentelle und Klinische Untersuchungen über das Verhaltniss der Harnsaureausscheidung zu der Leucocytose. Also W. Kühnau and F. Weiss: Weitere Mittheilungen zur Kenntniss der Harnsaureausscheidung bei Leukocytose und Hypoleukocytose, sowie zur Pathologie der Leukamie. Zeitschrift für Klinische Medicin, Berlin, 1897, Band xxxii., pp. 482-500.

[4] P. F. Richter: Ueber Harnsaureausscheidung und Leucocytose, Zeitschrift fur Klinische Medicin, Berlin, 1895, Band xxvii., pp. 280-311.

[5] Carstairs C. Douglas: Some Observations on the Excretion of Uric Acid, with Special Reference to its Connexion with Leucocytosis, Edinburgh Medical and Surgical Journal, 1900, new series, vol. vii., pp. 32-42.

[6] G. Zarnier: Rapporto tra Leucocytosi ed Eliminazione di Acido Urico, Gazzetta degli Ospedali, Milano, 1896, vol. xvii., pp. 678-679.

[7] C. Giajmis: La Genesi dell' Acido Urico in Rapporto alle Sostanze Nucleiniche, Gazzetta degli Ospedali, Milano, 1898, vol. xix., pp. 545-547.

[8] E. Reale: Il Ricambio della Nucleina in Rapporto alla Genesi dell' Acido Urico ed alla Patologia delle Affezioni Uricemiche, Clinica Medica, Pisa, 1898, vol. iv., pp. 169-171, 185, 225.

[9] The Metabolism of the Nucleins under Physiological and Pathological Conditions, by T. R. Milroy, M.D., B.Sc., assistant to the professor of physiology, Edinburgh University, and J. Malcolm, M.B., Journal of Physiology, Supplement, 1898-99, also 1899-1900.

[10] Hale White and Hopkins: On the Excretion of Phosphorus and Nitrogen in Leukæmia, Journal of Physiology, 1899.

in the amount of uric acid excreted is due to an increase in the destruction of the white cells, it is necessary to show a corresponding rise in the amount of phosphoric acid excreted; accordingly, besides daily observations of the amount of uric acid excreted, estimations of the daily amount of excretion of phosphoric acid were also made. As Milroy and Malcolm say, "it is hardly likely that there is a marked retention of the phosphoric acid in the organism and if there be not, then the absence of the rise in the phosphorus excretion negatives the view that the alloxur bodies are derived from the direct breaking down of the nucleins."

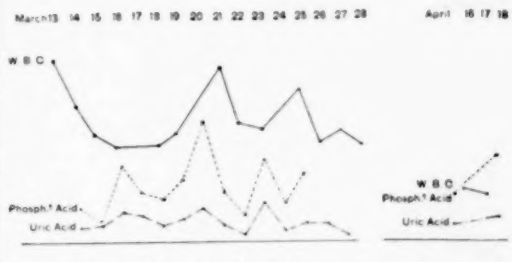
Now an increased destruction of the white cells means a diminution in the number of the old cells, the young cells either not diminishing at all, or at any rate not to a corresponding degree. Inasmuch as the polymorphonuclear neutrophiles—in this article I have adopted the classification of Cabot [11]—form by far the larger proportion of the white blood corpuscles in a healthy individual and are those concerned in ordinary leucocytosis, we will first consider them. Ehrlich's [12] view that the myelocyte and polymorphonuclear neutrophile represent different stages in the life history of one variety of cell, the myelocyte being the young cell, is generally accepted as correct. It is further probable that the small lymphocyte is quite distinct from these, being from first to last a small lymphocyte and nothing else, and that the large lymphocyte is, like the myelocyte, a young form of the polymorphonuclear neutrophile about the origin of which, however, we know less than in the case of the myelocyte. In examining a stained blood film from a case in which there is, or has recently been, a leucocytosis, forms intermediate in appearance between the myelocyte and the polymorphonuclear neutrophile are to be seen in varying numbers. The nucleus of one of these cells stains evenly and lightly; it is circular or oval or sometimes bilobed as if about to undergo division; moreover, at times not only the nucleus but the whole cell body is bilobed: the granules of the cell are similar to those of the polymorphonuclear neutrophile. Since all transition stages between the myelocyte and the polymorphonuclear neutrophile are represented by these cells it is clear that they are intermediate in age between these two varieties or are, in other words, simply young polymorphonuclear neutrophiles. Now if it be found as the result of observations made on two successive days that the polymorphonuclear neutrophiles are diminished in absolute number, the "young cells" (including the myelocytes) not being diminished or, at any rate, not being diminished to a corresponding degree, it may be assumed that a destruction of this form of white corpuscle has taken place. If, on the other hand, these show that whilst there has been a diminution in the absolute number of polymorphonuclear neutrophiles the number of the "young cells" is also markedly lessened, an increase in destruction of this variety of cell cannot be assumed, but rather a diminished production. In order to determine the absolute numbers of each variety of white corpuscle stained films were prepared and differential counts were made from specimens taken at the same time as those specimens from which the simple blood counts were made. By means of these differential counts one is thus able to obtain confirmatory evidence of the breaking down of the white blood corpuscle. As regards the small lymphocytes, inasmuch as we are unable to distinguish the young from the old forms of these an increased destruction of this variety of cell can only be inferred when there is a fall in the number thereof followed by a rise in the amount of excretion of phosphoric acid.

From an examination of the results it will be seen that in 17 out of 20 instances in which an increased excretion of phosphoric acid follows a fall in the white blood corpuscle curve, pointing to an increased destruction of white corpuscles, there is associated with this increase a corresponding increase in the amount of uric acid excreted. In 13 instances there is confirmatory evidence of increased destruction of the white cells obtained from the differential counts, whilst in three instances this confirmation, owing to the absence of differential counts, could not be obtained. In five instances the examination of the differential counts gave a directly opposite interpretation to the study of the white corpuscle and phosphoric acid curves, the one pointing to increased destruction and the other not. Most of the observations were on cases of advanced pulmonary tuberculosis; in these we may fairly assume, as Haig [13] has pointed out, that there is no retention of uric acid within the body. If we carefully examine the curves we shall see that in those cases in which there are great and sudden variations in the number of white cells, there are also great and sudden variations in the amounts of uric acid and phosphoric acid excreted. This tends to confirm the theory that uric acid is derived from the white corpuscles (compare, for instance, Cases 1 and 5, on the one hand, with the earlier observations on Cases 10 and 11 on the other). It will also be observed that in the case of the three children (Cases 1, 2, and 3) there is, relatively to the body-weight, more uric acid and phosphoric acid excreted than in the case of the adults. This may be explained by assuming a more rapid destruction of the white cells in the former case than in the latter. This is confirmed by reference to the curves, when we find that the rise of uric acid and phosphoric acid follows more closely on the fall of the white corpuscle curve than in the case of the adults.

As regards methods, the white blood corpuscle counts were made by the Thoma Zeiss hæmacytometer, the diluting solution used being a ½ per cent. solution of acetic acid in water coloured by gentian violet; the differential counts were made from films fixed by heat and stained by a modification of Ehrlich's triacid stain. The uric acid was estimated by Hopkins's method (by Folin's modification in Case 9). 100 cubic centimetres of urine were used for each estimation and the total quantity passed in the 24 hours being measured the total quantity of uric acid passed in the 24 hours was thus calculated. The phosphoric acid was estimated by means of the volumetric method with uranium nitrate, 50 cubic centimetres of urine being used for each estimation and the total quantity passed in the 24 hours being calculated as in the case of the uric acid. I append tables (Tables I. to XI.) and curves of the results obtained in the different cases. The observations were made on 11 patients and the results include upwards of 100 estimations of uric acid. The numbers in the columns headed "uric acid" and "P_2O_5" (phosphoric acid) are the amounts (in grammes) of these substances respectively passed in the urine in the 24 hours. The columns headed "W.B.C." show the number of white blood corpuscles per cubic millimetre. The columns under the headings "young cells" give the percentage of cells having the characters intermediate between those of myelocytes and polymorphonuclear neutrophiles as described above. Owing to unavoidable accidents the continuity of the observations was unfortunately broken in places and in the short description of the results which I shall now give only those differential counts will be discussed which have a definite bearing on the subject of this paper.

CASE 1.—The patient was a boy aged ten years. His weight was 3 stones 13 pounds. He had lymphadenoma with intermittent temperature. On examining the curves and tables it will be seen that there are two rises in the phosphoric acid curve corresponding with two rises in the uric acid curve following falls in the white corpuscle curve; also rises in the phosphoric acid and uric acid curves

FIG. 1.



corresponding with a fall in the white corpuscle curve. From a study of the differential counts (Table I.) we find evidence of breaking down (increased destruction) of the white cells between March 15th and 16th, 22nd and 23rd,

[11] Cabot: Clinical Examination of the Blood.

[12] Ehrlich and Lazarus: Histology of the Blood, translated by W. Myers, Chap. ii.

[13] Haig: Uric Acid as a Factor in the Causation of Disease.

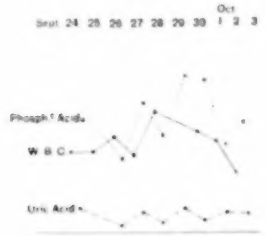
TABLE I.—*Case 1.*

Date.	P_2O_5 in grammes.	Uric acid in grammes.	W.B.C.	Differential counts.					
				Polymorphonuclear neutrophiles.	Lymphocytes. Large.	Lymphocytes. Small.	"Young cells."	Myelocytes.	Eosinophiles.
				Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
March 13th	—	—	22280	—	—	—	—	—	—
,, 14th	—	—	17250	75·19	14·07	4·20	3·75	1·49	1·29
,, 15th	0·42	0·18	13200	72·72	18·19	3·86	3·40	0·71	1·10
,, 16th	0·25	0·21	11800	71·38	19·02	3·10	4·37	0·54	1·55
,, 17th	0·94	0·36	—	—	—	—	—	—	—
,, 18th	0·62	0·33	12900	78·46	14·73	3·15	2·43	0·14	1·05
,, 19th	0·52	0·21	13500	74·82	13·54	5·19	4·20	0·75	1·48
,, 20th	0·76	0·30	—	—	—	—	—	—	—
,, 21st	1·47	0·40	21330	79·38	5·63	6·76	6·44	0·48	1·28
,, 22nd	0·62	0·21	14500	74·47	14·01	7·53	2·71	0·62	0·62
,, 23rd	0·51	0·08	13960	68·89	10·34	13·07	5·90	2·31	0·95
,, 24th	1·01	0·47	—	—	—	—	—	—	—
,, 25th	0·47	0·15	18640	65·91	13·81	16·78	3·14	0·18	0·18
,, 26th	0·85	0·22	12150	75·66	8·00	13·85	0·93	0·	1·49
,, 27th	—	0·21	13800	66·08	12·65	14·93	3·86	0·0	2·46
,, 28th	—	0·094	11930	—	—	—	—	—	—
April 16th	0·59	0·19	6260	71·23	7·79	16·63	0·0	0·0	4·33
,, 17th	0·80	0·25	5630	71·38	5·20	14·14	5·04	0·0	4·22
,, 18th	1·02	0·29	—	—	—	—	—	—	—

and finally April 16th and 17th, such evidence being, as I stated above, a decrease in the absolute number of polymorphonuclear neutrophiles, whilst the number of the myelocytes and young cells remains the same or even increases. These three occasions correspond with the three above-mentioned falls in the white corpuscle curve.

CASE 2.—The patient was a boy, aged seven years. He weighed 2 stones 10 pounds. He had chronic pulmonary tuberculosis and pyuria. There are seen to be marked rises of the phosphoric acid and uric acid curves (on Sept. 27th and 29th) respectively following falls in the white

FIG. 2.



corpuscle curve. Following the last fall in the white corpuscle curve is a rise in the phosphoric acid curve but not in the uric acid curve. From the differential counts (Table II.) there is evidence of breaking down of the white corpuscles between Sept. 26th and 27th, also between Sept. 30th and Oct. 1st, or in two out of the three instances in which a study of the three curves points to increased destruction of the white cells. Between Sept. 28th and 29th no differential counts were made.

CASE 3.—The patient was a male, aged seven years. His weight was 3 stones. He was suffering from chronic pulmonary tuberculosis. Here we find two rises in the phosphoric acid and uric acid curves immediately following falls in the white corpuscle curve. From examination of the differential counts (Table III.) there is evidence of increased destruction between Oct. 11th and 12th corresponding to one of these two falls. Between Oct. 16th and 17th, corresponding to

TABLE II.—*Case 2.*

Date.	P_2O_5 in grammes.	Uric acid in grammes.	W.B.C.	Differential counts.					
				Polymorphonuclear neutrophiles.	Lymphocytes. Large.	Lymphocytes. Small.	"Young cells."	Myelocytes.	Eosinophiles.
				Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
Sept. 24th	1·37	0·30	9690	56·24	10·26	27·48	1·42	0·0	4·58
,, 25th	1·18	0·17	9700	62·43	7·85	24·00	1·71	0·0	4·00
,, 26th	0·89	0·088	11560	55·54	12·39	25·65	2·33	0·14	3·93
,, 27th	1·56	0·24	9200	53·38	4·769	34·00	1·69	2·30	3·84
,, 28th	1·18	0·18	14600	66·24	10·58	19·69	0·91	0·0	2·37
,, 29th	1·90	0·28	—	—	—	—	—	—	—
,, 30th	1·85	0·13	12200	57·34	7·48	30·36	1·55	0·0	3·25
Oct. 1st	1·08	0·23	11000	60·70	7·44	26·78	1·74	0·0	3·33
,, 2nd	1·35	0·22	7100	54·59	7·08	31·56	1·28	0·48	4·99

the other white corpuscle fall, there is no evidence of increased destruction from the differential counts, except, perhaps, in regard to the small lymphocytes.

FIG. 3.

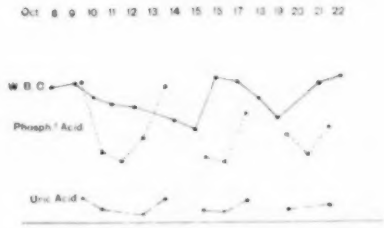
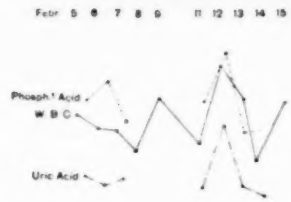


TABLE III.—*Case 3.*

Date.	P_2O_5 in grammes.	Uric acid in grammes.	W.B.C.	Differential counts.					
				Polymorphonuclear neutrophiles.	Lymphocytes. Large.	Lymphocytes. Small.	"Young cells."	Myelocytes.	Eosinophiles.
				Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
Oct. 8th	—	—	16460	—	—	—	—	—	—
,, 9th	—	—	16830	49·93	8·37	37·96	1·94	0·0	1·79
,, 10th	1·7012	0·30	15150	51·67	8·29	38·11	0·63	0·0	1·27
,, 11th	0·87	0·15	14400	53·34	8·47	35·36	1·33	0·0	1·48
,, 12th	0·75	0·12	14000	45·78	8·44	43·18	2·04	0·0	0·54
,, 13th	1·01	0·094	—	—	—	—	—	—	—
,, 14th	1·57	0·25	12430	60·74	3·23	33·67	0·44	0·0	1·91
,, 15th	—	—	11250	50·60	9·07	37·90	2·01	0·0	0·40
,, 16th	0·79	0·13	17400	56·73	5·57	35·98	1·43	0·0	1·27
,, 17th	0·72	0·11	17000	67·44	2·54	27·25	0·69	0·0	2·07
,, 18th	1·29	0·25	15130	61·82	9·23	27·83	0·0	0·0	1·11
,, 19th	—	—	12530	57·14	6·10	33·92	1·78	0·0	1·04
,, 20th	1·06	0·15	—	—	—	—	—	—	—
,, 21st	0·81	0·17	16700	60·00	6·40	36·62	2·03	0·0	0·93
,, 22nd	1·13	0·20	17500	60·19	6·47	30·42	1·13	0·16	1·61

CASE 4.—The patient was a male, aged 20 years. He was suffering from caseous pulmonary tuberculosis. He died on Feb. 16th. In this case we find marked rises in the phosphoric acid and uric acid curves following one fall in the

FIG. 4.



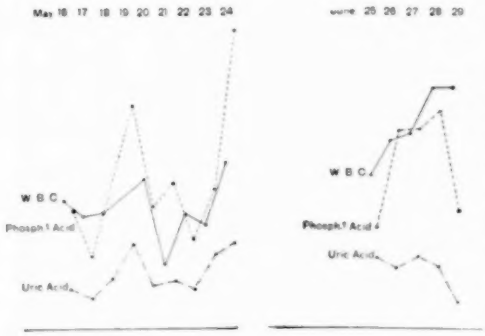
white corpuscle curve (between Feb. 9th and 11th). Unfortunately, no differential counts were made between Feb. 9th and 11th. (Table IV.)

TABLE IV.—*Case 4.*

Date.	P_2O_5 in grammes.	Uric acid in grammes.	W.B.C.	Differential counts. Polymorphonuclear neutrophiles.	Lymphocytes. Large.	Lymphocytes. Small.	"Young cells."	Myelocytes.	Eosinophiles.
				Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
Feb. 5th	—	—	15200	79·75	4·63	8·96	6·02	0·15	0·46
,, 6th	1·70	0·77	13600	85·78	4·47	7·18	2·07	0·0	0·48
,, 7th	1·93	0·67	13400	77·21	5·84	10·54	5·41	0·99	0·0
,, 8th	1·44	0·76	10850	80·91	4·56	10·64	3·54	0·17	0·17
,, 9th	—	—	17380	75·48	2·45	12·25	9·10	0·17	0·52
,, 10th	—	—	—	—	—	—	—	—	—
,, 11th	—	—	12050	—	—	—	—	—	—
,, 12th	1·70	0·65	21500	85·52	4·25	8·51	1·53	0·17	0·10
,, 13th	2·30	1·42	17500	84·21	5·08	8·42	1·93	0·35	0·0
,, 14th	1·34	0·67	9600	87·46	4·12	5·44	2·80	0·16	0·0
,, 15th	1·38	0·56	17000	86·05	3·26	7·78	2·71	0·18	0·0

CASE 5.—The patient was a male, aged 21 years, suffering from caseous pulmonary tuberculosis. He died on June 30th. On examining the table (Table V.) and curves we see two well-marked rises in the phosphoric acid and uric acid curves following falls in the white corpuscle curve, also a slight rise

FIG. 5.



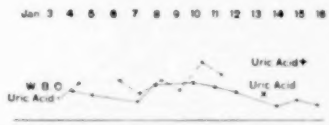
of each following a fall in the white corpuscle curve. In only one instance is confirmatory evidence of increased destruction to be obtained from the differential counts—viz., between May 16th and 17th. Between May 20th and 21st and 22nd and 23rd there is no confirmatory evidence of increased destruction.

TABLE V.—*Case 5.*

Date.	P_2O_5 in grammes.	Uric acid in grammes.	W.B.C.	Differential counts. Polymorphonuclear neutrophiles.	Lymphocytes. Large.	Lymphocytes. Small.	"Young cells."	Myelocytes.	Eosinophiles.
				Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
May 16th	1·49	0·49	15700	83·93	6·15	3·86	4·16	1·38	0·40
,, 17th	0·89	0·38	13580	79·51	6·20	7·51	5·07	0·75	0·94
,, 18th	1·82	0·62	14100	80·07	5·71	6·23	6·75	0·17	0·69 (also basophiles 0·35)
,, 19th	2·74	1·04	—	—	—	—	—	—	—
,, 20th	1·49	0·54	18300	81·44	5·30	8·90	2·08	0·57	1·51 (also basophiles 19)
,, 21st	1·77	0·59	7900	85·74	3·61	6·22	2·61	0·20	1·60
,, 22nd	1·08	0·49	14000	78·92	5·23	8·24	6·02	0·31	1·27
,, 23rd	1·69	0·89	12570	81·62	6·35	9·62	1·20	0·17	1·03
,, 24th	3·62	1·06	20270	80·25	6·87	4·93	5·99	1·23	0·71
,, 25th	—	—	—	—	—	—	—	—	—
June 25th	1·22	0·85	18500	90·71	3·48	2·65	1·16	1·99	0·0
,, 26th	2·40	0·74	22800	85·55	1·82	2·82	6·64	3·15	0·0
,, 27th	2·40	0·87	23800	87·07	1·30	3·60	4·41	3·60	0·0
,, 28th	2·66	0·77	29250	88·87	4·17	2·26	2·60	2·08	0·0
,, 29th	1·42	0·34	29500	—	—	—	—	—	—

CASE 6.—The patient was a female, aged 21 years, suffering from caseous and miliary pulmonary tuberculosis. Unfortunately, no estimations of phosphoric acid and no continuous differential counts were made in this case. It may be noted, however, that after each fall in the white corpuscle

FIG. 6.



The marks + × represent readings of uric acid.

curve there is a rise in the uric acid curve, the most marked rise (that between Jan. 13th and 15th) occurring after the longest and most marked fall in the blood corpuscle curve. The low white corpuscle counts in this case should be noted. (Table VI.)

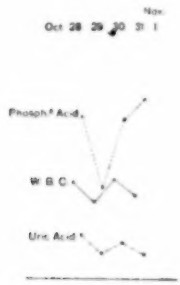
TABLE VI.—*Case 6.*

Date.	Uric acid in grammes.	W.B.C.	Date.	Uric acid in grammes.	W.B.C.
Jan. 4th	0·29	3600	Jan. 11th	0·71	4111
,, 5th	0·47	3166	,, 12th	0·55	3400
,, 6th	—	—	,, 13th	—	—
,, 7th	0·49	2400	,, 14th	0·30	1600
,, 8th	0·33	4300	,, 15th	—	2500
,, 9th	0·49	—	,, 16th	0·70	1750
,, 10th	0·37	4600			

CASE 7.—The patient was a female, aged 36 years, suffering from caseous and miliary pulmonary tuberculosis. Here we see that after the fall in the white blood count between

Oct. 28th and 29th there are marked rises in the curves of phosphoric acid and uric acid. No confirmatory evidence of

FIG. 7.



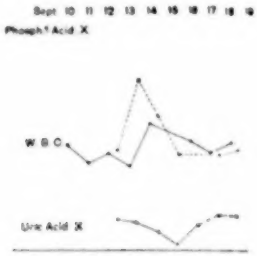
increased destruction is obtainable from the differential counts between Oct. 28th and 29th. (Table VII.)

TABLE VII.—*Case 7.*

Date.	P_2O_5 in grammes.	Uric acid in grammes.	W.B.C.	Differential counts.					
				Polymorphonuclear neutrophiles.	Lymphocytes. Large.	Lymphocytes. Small.	"Young cells."	Myelocytes.	Eosinophiles.
				Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
Oct. 28th	1·07	0·53	11700	70·54	6·84	19·42	1·75	0·0	1·43
,, 29th	1·11	0·31	9300	73·28	4·92	19·70	0·59	0·0	1·49
,, 30th	1·93	0·44	12100	60·86	4·46	29·58	4·16	0·15	0·77
,, 31st	2·18	0·30	10130	68·30	8·92	17·26	2·62	0·59	2·38
Nov. 1st	—	—	—	—	—	—	—	—	—

CASE 8.—The patient was a male, aged 21 years, suffering from caseous pulmonary tuberculosis. Here there is nothing in confirmation of the theory that uric acid is produced by the destruction of the white blood corpuscles. There are two rises in the phosphoric acid curve following falls in the blood corpuscle curve between Sept. 10th and 11th and Sept. 16th and 17th respectively, but neither of them corresponds with a rise in the uric acid curve. From the differential counts we find that there is evidence of increased

FIG. 8.



The marks × represent readings of uric and phosphoric acid.

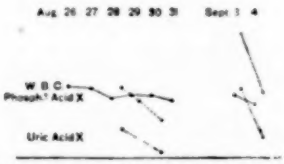
destruction of the white cells between Sept. 10th and 11th, 12th and 13th, and finally 16th and 17th. (Table VIII.) The first and last of these three occasions correspond then to the two periods of increased destruction as shown by the white corpuscle and phosphoric acid curves; in the second case, however, there is no succeeding rise in the phosphoric acid curve and therefore no other evidence of increased destruction.

TABLE VIII.—*Case 8.*

Date.	P_2O_5 in grammes.	Uric acid in grammes.	W. B. C.	Differential counts.					
				Polymorphonuclear neutrophiles.	Lymphocytes. Large.	Lymphocytes. Small.	"Young cells."	Myelocytes.	Eosinophiles.
				Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
Sept. 10th	—	—	12830	81·11	3·22	10·44	3·99	0·76	0·46
,, 11th	2·65	0·28	10600	76·43	6·56	10·77	4·37	0·67	1·17
,, 12th	—	—	11900	80·95	5·39	8·73	2·38	0·16	2·38
,, 13th	1·22	0·37	10300	80·20	3·49	6·64	7·42	0·43	1·60
,, 14th	2·09	0·35	15600	82·82	4·42	8·33	1·87	0·17	2·38
,, 15th	1·62	0·24	—	—	—	—	—	—	—
,, 16th	1·18	0·07	13400	83·12	5·34	5·62	3·89	0·14	1·87
,, 17th	1·18	0·30	12000	81·95	3·41	7·31	3·90	0·32	3·08
,, 18th	1·17	0·43	13150	84·67	3·61	8·81	0·39	0·0	2·11
,, 19th	1·24	0·41	—	—	—	—	—	—	—

CASE 9.—The patient was a male, aged 40 years, suffering from chronic pulmonary tuberculosis. In this case it is probable that a rise in the phosphoric acid and uric acid curves occurred soon after the 31st inst., following a slight

FIG. 9.



The marks × represent readings of uric and phosphoric acid.

fall in the white corpuscle curve. There is evidence of increased destruction from the differential counts between August 29th and 30th. (Table IX.) Here there is little evidence either for or against the theory.

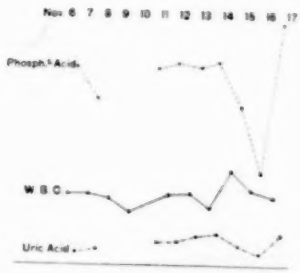
TABLE IX.—*Case 9.*

Date.	P_2O_5 in grammes.	Uric acid in grammes.	W. B. C.	Differential counts.					
				Polymorphonuclear neutrophiles.	Lymphocytes. Large.	Lymphocytes. Small.	"Young cells."	Myelocytes.	Eosinophiles.
				Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
August 26th	0·75	0·27	8750	62·55	5·92	28·12	2·01	0·0	1·38
,, 27th	—	—	8550	63·82	8·68	24·89	0·57	0·0	2·02
,, 28th	—	—	7400	64·99	3·34	25·41	2·73	0·30	3·19
,, 29th	0·86	0·35	7830	67·00	7·96	21·41	1·73	0·14	1·73
,, 30th	0·69	0·22	7600	63·94	3·91	27·56	2·89	0·0	1·70
,, 31st	0·46	0·064	7150	61·72	6·43	28·21	1·32	0·49	1·81
Sept. 3rd	—	—	7750	57·83	8·02	27·13	4·45	0·13	2·42
,, 4th	1·51	0·86	6500	64·73	5·64	25·23	2·19	0·0	2·19
,, 5th	0·83	0·25	—	—	—	—	—	—	—

CASE 10.—The patient was a male, aged 62 years, suffering from chronic pulmonary tuberculosis, bronchitis, and emphysema. Here we see two rises in the phosphoric acid and uric acid curves, slight ones on Nov. 13th and very marked ones on Nov. 16th, following two falls in the white corpuscle curves. From a study of the differential counts we obtain confirmatory evidence of increased destruction of the white

corpuscles between Nov. 12th and 13th, corresponding to the first of these occasions. Corresponding to the second there

FIG. 10.



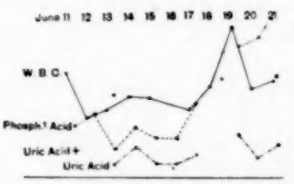
is no confirmatory evidence, seeing that no differential count was made either on Nov. 14th or 15th. (Table X.)

TABLE X.—*Case 10.*

Date.	P_2O_5 in grammes.	Uric acid in grammes.	W.B.C.	Differential counts.						
				Polymorphonuclear neutrophiles.	Lymphocytes. Large.	Lymphocytes. Small.	"Young cells."	Myelocytes.	Eosinophiles.	Basophiles.
				Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
Nov. 6th	2·43	0·17	8700	65·74	6·06	22·95	1·80	0·16	2·78	0·49
,, 7th	—	—	8830	54·96	6·2	28·89	5·38	0·0	3·96	0·56
,, 8th	2·03	0·21	8150	—	—	—	—	—	—	—
,, 9th	—	—	6550	63·91	5·15	25·15	2·06	0·21	3·29	0·21
,, 10th	2·41	0·29	—	—	—	—	—	—	—	—
,, 11th	2·48	0·30	8700	66·62	5·07	22·76	2·15	0·0	2·77	0·61
,, 12th	2·42	0·35	8820	64·64	4·70	24·73	2·73	0·0	2·88	0·30
,, 13th	2·50	0·39	7020	62·37	5·30	26·67	2·47	0·0	2·82	0·35
,, 14th	1·94	0·24	11450	—	—	—	—	—	—	—
,, 15th	1·12	0·15	9050	—	—	—	—	—	—	—
,, 16th	2·94	0·36	8360	66·36	3·69	24·58	2·40	0·0	2·58	0·36
,, 17th	—	—	—	—	—	—	—	—	—	—

CASE 11.—The patient was a female, aged 42 years. She was suffering probably from a new growth of the mediastinum. She died on June 22nd. In this case there are three

FIG. 11.



The mark + represents a reading of phosphoric acid.

corresponding rises in the phosphoric acid and uric acid curves following respectively three falls in the white blood corpuscle curve. There is, corresponding to these three occasions, confirmatory evidence of increased destruction of the white blood corpuscles between June 11th and 12th, 14th and 15th, and finally between the 19th and 20th. (Table XI.)

TABLE XI.—*Case 11.*

Date.	P_2O_5 in grammes.	Uric acid in grammes.	W.B.C.	Differential counts.						
				Polymorphonuclear neutrophiles.	Lymphocytes. Large.	Lymphocytes. Small.	"Young cells."	Myelocytes.	Eosinophiles.	
				Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	
June 11th	—	—	12700	51·97	11·21	31·43	0·79	0·15	4·42	
,, 12th	0·64	0·27	7300	58·81	7·05	30·79	1·48	0·0	1·85	
,, 13th	0·79	—	8300	54·24	5·59	34·06	1·35	0·0	4·74	
,, 14th	0·34	0·17	9900	55·89	11·77	26·36	2·81	0·0	3·15	
,, 15th	0·63	0·38	9760	52·04	16·83	23·97	2·89	0·17	4·08	
,, 16th	0·49 (mean of two days)	0·17 (mean of two days)	—	—	—	—	—	—	—	
,, 17th	0·49 (mean of two days)	0·17 (mean of two days)	8160	64·24	4·23	24·40	1·69	0·34	5·08	
,, 18th	0·93	0·29	—	—	—	—	—	—	—	
,, 19th	—	—	11060	67·35	5·33	25·27	0·15	0·0	1·88	
,, 20th	1·59	0·54	18300	68·12	12·07	14·97	3·22	0·16	1·45	
,, 21st	1·70	0·24	10700	70·33	12·12	11·80	3·82	1·27	0·48	
,, 22nd	2·11	0·39	11600	69·32	10·41	15·72	2·65	1·13	0·76	
			—	—	—	—	—	—	—	

To Dr. Eustace Smith and to my colleagues at the City of London Hospital for Diseases of the Chest, Victoria Park, Dr. G. A. Heron, Dr. E. C. Beale, Dr. H. Sainsbury, Dr. T. Glover Lyon, and Sir Hugh Beevor, I am indebted for permission to use the results obtained from cases under their care.

Upper Berkeley-street, W.

A FORM OF REMOVEABLE DEEP SUTURE.

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ALTHOUGH an aseptic buried suture should remain buried and never be heard of further, still it does sometimes happen that such a suture will, after a time, make its presence known by causing the formation of a pustule to be followed by a sinus which will not heal until the offending stitch has been removed. This may happen after the completely aseptic healing of the original wound and even after every precaution has been taken in the preparation of the suture material. This reappearance of the suture is always a cause of annoyance to the patient and of heart-searching to the surgeon and, if a continuous suture has been used, as for instance, in the peritoneal suture after abdominal section, may necessitate the performance of an operation involving the opening up of the whole original wound. In order to get over this difficulty it is necessary to devise some form of suturing in which the deep suture, although practically buried, may still be removed at any period after the healing of the wound. Again, after many operations, such as those involving suturing at the bottom of cavities, such as in the vagina for vesico-vaginal fistulæ or in colporrhaphy, the patient has to undergo what may cause her almost more suffering than the original operation when the time comes for removing the stitches; and here again the use of an easily removeable suture would be of immense advantage both to the surgeon and to the patient.

It is evident that to be capable of removal at a period subsequent to complete inclosure in a healed wound, any suture of more than a single point must be a continuous one and the form of continuous suture most easily removed by a single application of force would seem to be that which is commonly known as the ordinary machine chain stitch and in order to make use of this it is only necessary to employ a form of needle which will take the entering and returning thread through the same hole. This, then, was the first form

of stitch which I experimented with. In working this out on inanimate objects it answered perfectly well, but when it came to applying it to the living subject it was found that during the process of healing in the wound the chain gut, as it were, fouled by the uniting tissue and the stitch would not pull out easily. Being dissatisfied with this I then tried the other form of sewing machine or "lock" stitch, and this was found quite satisfactory and perfectly easy of removal provided certain points in its application were attended to.

In the ordinary sewing-machine the efficiency and neatness of the stitching depend upon preserving the ratio between the tensions of the two threads employed. If the tension is properly regulated the interlocking of the threads will take place in the substance of the material under suture, whereas if the tension of one of the threads be greater than that of the other the interlocking of the threads will take place on the surface of the material and on the side of the thread with the highest tension. By using two threads with different pliability in surgical suturing the same effect can be produced as would be caused by extreme difference in the tension in machining; thus, if one thread be of silk and the other of, say, stiff steel wire it is obvious that instead of the threads interlocking in the substance of the material they will hardly interlock at all, but the more pliable silk will simply pass round the stiff wire and the turns will all be on the side of the material to which the wire is applied, and, further, it will be found that on pulling the wire this can be easily withdrawn and in consequence the silk, having lost its support, can also be withdrawn with the slightest pull.

The method of introducing the suture is of the simplest. All that is required is a mounted needle with an eye near the point; through this is threaded a long piece of silk. This forms the primary thread; the secondary thread is best formed by a stout piece of silkworm-gut which is sufficiently rigid to avoid kinking and being drawn into the sutured tissue. Supposing the peritoneum is to be sutured after a laparotomy the procedure will be as follows:—The two layers of the peritoneum which are to be sewn together are defined; the mounted needle, threaded, with the long end of the thread on the left hand or upper side of the needle when held as it will be when piercing the tissue, is passed from the operator through both layers of the peritoneum, beginning at the lower angle of the wound. The needle is then withdrawn, leaving a loop of silk protruding through the layers of peritoneum on the side of the assistant; through this loop the assistant passes the end of the silkworm-gut, from below upwards, and the loop is withdrawn flush with the assistant's side of the united flaps. The needle, not having been unthreaded, is again thrust through the flaps for the second stitch and again withdrawn, leaving a loop as in the first instance; the silkworm-gut is threaded through this second loop and the process is repeated till the whole of the flaps are united; these being held together by a series of silk loops, the primary thread, held in position by the secondary thread of silkworm-gut passing through the loops on the assistant's side. The needle is next unthreaded, leaving a fairly long end to the silk. There will be now on the face of the wound, on the side of the surgeon, the two ends of silk, one entering the peritoneal flaps at the lower end of the wound and the other leaving the peritoneum at the upper end, and on the side of the assistant the silkworm-gut thread passing through the silk loops and also with long ends, one at the lower end of the wound and the other at the upper end. The silkworm-gut thread should now be put on the stretch and pulled gently backwards and forwards to see that it is nowhere kinked and that it can be withdrawn. This having been done, the four ends, two silk and two silkworm-gut, are each in turn threaded on an ordinary needle and made to pierce the skin on its own side of the wound and are left thus whilst the wound in the abdominal wall is sutured in the ordinary way. This having been done the two lower ends of the peritoneal suture, being one of silk and the other of silkworm-gut, are then tied together and cut to a convenient length. The same is done with the two ends at the upper end of the wound and the process is complete.

When it is required to remove the deep stitch, which may be any time after the wound is healed, all that is required is to cut the lower united stitches on the silk side of the knot and the upper stitch on the gut side of the knot, or *vice versâ*, and to pull out first the silkworm-gut stitch which will offer no resistance, and then the silk stitch which having lost its support can be pulled out with equal facility.

The suturing itself can be done quite as rapidly as the ordinary continued suture and the only point requiring special attention is not to pull the silk loops so tight that they drag the silkworm-gut thread into the stitch hole or on to the silk side of the wound.

The method is applicable to any form of buried suture which it may be desirable to remove after healing, except that if the suturing has to take a curve of more than about a sextant two or more separate silkworm gut threads will have to be used in following the curve; otherwise, if the one thread has to curve round too great a part of a circle it will be found to drag on the loops on an attempt at withdrawal and will not run.

There would appear to be no limit, in reason, to the time that the suture may be left in position without causing trouble, provided the part be kept aseptic; thus, in cases of radical cure of hernia I have kept the stitches closing the ring in position for 15 days without any sign of suppuration or irritation and with no indication that such was likely to occur, and at the end of that time have removed the stitches without the slightest difficulty.

Up to the present I have employed the stitch in cases of laparotomy, in radical cure of hernia, in suprapubic cystotomy, for suturing the pleura in cases of abscess of the liver, and in colporrhaphy, and have found it to answer very well.

Cairo.

A CASE OF TYPHOID PANCREATITIS.

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IT has been generally recognised, since Riedel in 1892 first drew attention to the fact, that chronic pancreatitis is not infrequently dependent upon the irritation of gall-stone disease. The constantly recurring attacks of cholangitis aroused by the passing of a stone down the cystic and common ducts, the impaction of a stone in the lower end of the common duct, and especially its lodgment in the ampulla of Vater, may all be the determining causes of a chronic inflammation of the pancreas.

Among causes other than gall-stones which are capable of originating an acute inflammation of any part of the bile passages typhoid fever, as shown by Murchison, Keen, and many others, takes a prominent place. The bacillus typhosus may be found in the bile for many months or even years after an attack of typhoid fever. In one case a pure culture of the organism was obtained from the bile in the gall-bladder after seven years. Since the common bile-duct and the duct of the pancreas have a common opening into the duodenum at the ampulla of Vater it is not difficult to understand how an ascending infection attacking the bile passages may also affect the canal of Wirsung. In the following case there was a condition of typhoid pancreatitis associated with an infection of the gall-bladder by the bacillus typhosus.

The patient, a boy, aged 13 years, who was sent to me by Dr. W. A. H. Waite of Leeds, was admitted to the Leeds General Infirmary on March 2nd, 1903. The history of the case was that he had been in his usual good health up to September, 1901. In that month he had typhoid fever, from which he made a slow but satisfactory recovery. At frequent intervals since his convalescence he complained of attacks of pain in the upper part of the abdomen. When asked to point out the seat of the most severe pain he laid his hand across the epigastrium. The pain on several occasions had lasted for three or four hours and had been accompanied by feelings of nausea and, though rarely, by vomiting. In November, 1902, for the first time such an attack was followed by jaundice which lasted for several days and then gradually cleared away. Almost every week since November similar attacks of pain, varying in intensity, had occurred and the jaundice had deepened slightly after each attack. The jaundice had never cleared away completely, though it had varied much in depth of tinge. There had never been any elevation of temperature when the pain had come and there had been neither shivering nor flushing. For the last three months the appetite had been poor and the boy had become considerably emaciated.

On examination of the abdomen there was distinct tenderness in all the region above the level of the umbilicus. Nothing abnormal could be felt. A diagnosis of typhoid infection of the gall-bladder, probably resulting in gall-stones one of which had stayed in the common duct, was made. On March 6th the abdomen was opened. The gall-bladder contained bile but no stones. There were no adhesions around the bladder or the bile-ducts. There was no stone in any part of the bile passages. The cause of the jaundice was found in the pancreas. The head and much of the body of the pancreas were found to be at least twice as large as the normal and almost as hard as stone. I have never felt even in old-standing cases of chronic indurating pancreatitis a gland so intensely hard as this was. The common duct was obviously buried in a mass of densely hard inflammatory material in the head of the pancreas. The gall-bladder was aspirated and about half an ounce of bile was withdrawn into a sterilised vessel. A drainage-tube was sutured into the gall-bladder and the abdominal wound was closed in the usual way. The bile was handed over to Dr. J. A. Cairns Forsyth for examination. His report read as follows:—

An agar tube was inoculated with the bile. The resulting growth was examined and found to be composed of bacilli resembling the bacillus coli or the bacillus typhosus. The bacilli had the following properties: (1) in fluid gelatin they cause a uniform turbidity without the formation of any flocculi; (2) they do not coagulate or curdle milk; and (3) they do not produce an acid reaction on litmus agar. The organisms are therefore typhoid bacilli.

Dr. Forsyth then examined the blood for Widal's reaction and reported as follows:—

The serum gave a positive reaction—1 in 20 instantaneously, 1 in 60 in ten minutes, and 1 in 100 in 40 minutes.

The gall-bladder was drained for four weeks. Recovery was uninterrupted and in all respects most satisfactory.

This case is, so far as I can ascertain, the first in which an inflammation of the pancreas due to typhoid fever has been recognised. I have operated now upon 13 cases of chronic pancreatitis, but in no instance have I observed so gross an alteration in the size and consistence of the gland. At the end of three weeks the bile discharged from the gall-bladder was examined by Dr. Forsyth and was found to contain very large numbers of typhoid bacilli. I then ordered urotropine in ten-grain doses thrice daily, the dose being increased to 15 grains four days later. On the eleventh day after the commencement of the giving of the drug the bile was again examined and was found to contain no typhoid organisms, only "a few cocci."

Leeds.

SOME OBSERVATIONS ON MOVEABLE KIDNEY.[1]

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I WISH in this communication to draw attention to some points of interest relative to moveable kidney and to show the conclusions to which I have come. I have seen very many cases of this condition and I have notes of 12 cases in which I performed a fixation operation. Of these 12 cases all the patients were women except one who was a young man. In all of these cases I operated by the same method—i.e., that recommended by Morris—with one modification. In all the result was aseptic. I do not think permanent complete fixation has been the rule, but, as Edebohls has pointed out, a certain degree of return of mobility is not inconsistent with perfect success as regards the relief of symptoms.

It is now well recognised that moveable kidney is a cause of various and diverse symptoms—that it may induce vomiting and other gastric manifestations, jaundice and hepatic colic, or symptoms which belong to the kidney itself, and that it may be associated with a neurasthenic condition. With such diversity of symptoms it can readily be understood that moveable kidney is a common cause of mistaken diagnosis. Sometimes cases of moveable kidney are mistaken for something else—e.g., those in which vomiting occurs are supposed to be cases of gastric ulcer or those with jaundice to be cases of gall-stones. On the other hand, symptoms due to something else may be supposed to be due to moveable kidney and this kind of mistake is apt to be attended with serious consequences, as in a case to which I must refer in some detail presently. There are two facts which when fully realised ought to safeguard one against both classes of error to some extent. First it should be remembered that moveable kidney is of exceedingly common occurrence and often is the sole cause of some of those symptoms to which I have alluded. In the second place, it should still more carefully be borne in mind that the moveable kidney, whatever degree of mobility it may possess, may be a cause of no symptoms.

We may conveniently arrange these cases of moveable kidney which cause symptoms into certain groups as follows: (1) those with slight discomfort, such as a dragging sensation and associated with vague general ill-health, with or without hysterical manifestations; (2) those in which the symptoms are of the gastro-intestinal type; (3) those with hepatic symptoms; and (4) those having distinctly renal symptoms. I think that the last must be very uncommon. At all events, I have not met with a single case and I will not therefore allude to them further.

Those cases of the first group with hysterical symptoms present special difficulties. Hysterical women often have a moveable kidney; they are often unaware of this and have no symptoms referable to it. In these circumstances it is obviously a folly to advise nephropexy or, indeed, to make the patient aware that her kidney is moveable. If, however, she is made aware one way or another that she has a moveable kidney an operation *may* do good. I have had one remarkable success in the case of a woman of this class.

CASE 1.—The patient was emaciated, complained of pain and fulness after eating, was much constipated, and was quite unfit for work. She was Dr. H. T. Bewley's patient and having fruitlessly tried ordinary remedies he handed her over to my care. I fixed her kidney in January, 1901, kept her in bed for six weeks, and had her massaged during part of this time and well fed. I saw her again about six months after the operation and found her in perfect health, scarcely to be recognised as her face had so filled out, and able to perform her day's work without discomfort. She had put on three stones in weight. I can justly claim this as a success, but in so doing I must confess to a failure in another case of the same class.

I have now something to say about the more interesting and satisfactory group presenting gastric or gastro-intestinal symptoms. I may begin by recording a fortunate case as I must end by telling of one which was most unfortunate.

CASE 2.—The patient was a young woman who had been treated for several years for a supposed gastric ulcer. She had suffered from repeated attacks of vomiting and pain. The pain was at first felt in her back in the lumbar region but for the last two or three years in the right hypochondrium. An attack might last with remissions from a few days to a month and then she might have an interval of perfect health for several months. It is specially noted by Dr. G. Peacocke, under whose care she was in the hospital, that the pains and vomiting were quite independent of food, and, further, it was stated that an attack never commenced while she was in bed and that it was sometimes relieved by lying down. She had on no occasion vomited blood. Dr. Peacocke found her right kidney very moveable and at his request I performed a fixation operation. This was in October, 1901, and since then the patient has been in perfect comfort and has only vomited once.

This case is an instance of the very common mistake of assigning to organic disease of the stomach symptoms that are due to moveable kidney. The differential diagnosis is, I think, sufficiently brought out in the details which I have given. As an example of the opposite kind of mistake I may just mention a case I saw a year or two ago in which, with stomach symptoms, there was felt a tumour in the left hypochondrium which descended from under the ribs on aspiration and closely simulated moveable kidney.

CASE 3.—The case was Dr. F. T. Heuston's and an exploratory laparotomy showed the tumour, which I thought was a moveable kidney, to be a massive cancer of the stomach which had been dragged by its weight into an unusual position. As comment, I may point out that the kidney-like tumour was on the left side, that the right kidney was not moveable, and that a left kidney is rarely if ever moveable without its fellow on the right side being moveable also.

Moveable right kidney may be a cause not only of pain and vomiting but also of an actual dilatation of the stomach

[1] A paper read before the Dublin Biological Club on March 24th, 1903.

and it has been fully established that this dilatation may be due to peritoneal bands formed by the dragging of the kidney.

CASE 4.—About a year ago I operated upon a young woman, one of Dr. Peacocke's patients who was suffering from pain and vomiting and presented the physical signs of a moderately dilated stomach. I fixed her right kidney which was very moveable and for six months her symptoms seemed to have been relieved. At the end of this time, however, she began again to suffer and quite recently she was again admitted to the hospital. At an exploratory laparotomy I found the stomach below its normal position, it was large and toneless, but with no evidence of kinking or other cause of obstruction at the pylorus. The pancreas and second stage of the duodenum could be lifted right away from the back of the abdomen. No fixing of the kidney (the kidney in this case had remained quite well in place since the operation a year previously) nor, indeed, any other operation could be expected to do good under these conditions. Without attaching too much importance to this case, which may be quite exceptional, I may at least suggest caution in assigning to moveable kidney a dilatation of the stomach even though the mobility be marked, the patient young, and previous gastric ulceration improbable.

Let me now relate the history of the unfortunate case to which I have referred.

CASE 5.—A woman, aged 37 years, was admitted to hospital on Nov. 16th, 1901. Four years, and again one year, previously she had suffered from pain and flatulence after food. She did not vomit and was not constipated. In February, 1901, she had what was believed to be an attack of influenza. At this time purgatives caused pain about the umbilicus. In May she had an attack of acute pain in the right side and pain after passing urine and this lasted three days. At the same time she had again pain after food. She also vomited and passed some blood per rectum. In June she lifted a heavy weight and a return of pain and vomiting followed. In July and in September she had other attacks of pain and she vomited black material. When admitted to hospital in November she was very thin and she said that she had lost much flesh. Her abdomen was quite flaccid and not distended. No tumour could be felt anywhere, but fæcal masses marked out the course of the colon and she had a very moveable right kidney. The feculent masses were removed by a succession of enemata. On Nov. 30th I sutured the moveable kidney in place and all went well subsequently for a time. In the middle of December, however, symptoms of obstruction appeared and gradually increased. Great peristaltic waves were observed and she got severe paroxysms of pain. I opened the abdomen on Dec. 15th and found a stricture of the sigmoid flexure. I incised the strictured part and I regret to say that the patient died on the 20th. The stricture was non-malignant. I have given an account of this case at some length because it has impressed upon myself a very important lesson regarding over-confidence in the diagnosis of moveable kidney as a cause of obscure abdominal symptoms.

It remains to say something of moveable kidney with hepatic symptoms, but I cannot do more now than briefly state my experience.

CASE 6.—I operated upon a female patient of Dr. Wallace Beatty in March, 1901, who had suffered from severe hepatic colic and was jaundiced at the time of operation. Her right kidney was very moveable and her gall-bladder was dilated. There was no gall-stone found though one was carefully searched for. I fixed the kidney and stitched the opened gall-bladder to the parietes. This patient has been quite well since.

CASE 7.—About a year ago Dr. Bewley saw with me a woman who was suffering from severe pain like that which a gall-stone causes. There was much tenderness in the right hypochondrium and when this became less we could quite easily make out a dilated gall-bladder and a moveable kidney. She was not at any time jaundiced. When the gall-bladder tumour disappeared she got an abdominal belt and has been in comfort since.

In addition to these cases I have seen two in which gall-stones and moveable right kidney were present together and still other cases in which with the moveable kidney jaundice was the only hepatic symptom.

With this personal experience it could not be but that I should be a believer in what is indeed commonly accepted as fact—i.e., that moveable kidney may induce symptoms scarcely to be distinguished from those due to gall-stones. Jaundice is common; the co-existence of gall-stones and moveable kidney is not uncommon; and there are now on record many cases of biliary colic similar to the case I have referred to (Case 6).

Now let me briefly state some of my conclusions. 1. That in neurasthenic cases nephropexy *may* do good seems to me proved by the first case I have described. 2. Vomiting and other gastric symptoms can certainly be cured, but if dilatation of the stomach is present a guarded prognosis must be given. I have narrated a case of failure in these circumstances but I have had in an analogous case a decided success. 3. The unfortunate case of mistaken diagnosis which I have described should make one most cautious in concluding that a moveable kidney is a cause of obscure abdominal symptoms. 4. Moveable kidney occasionally causes symptoms which exactly simulate those due to gall-stones, but seeing that the coincidence of moveable kidney and gall-stones is not uncommon it would be unwise merely to fix the kidney without a preliminary examination of the gall-bladder and ducts. Finally, whilst readily granting that most cases of moveable kidney cause no symptoms and therefore require no operation, there remain many which do cause symptoms and in a fair proportion of these an excellent result from nephropexy may confidently be anticipated.

Dublin.

APPENDICITIS WITH PROFUSE INTESTINAL HÆMORRHAGE CLOSELY RESEMBLING TYPHOID FEVER.

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AND

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THE recognised complications of appendicitis are many but the occurrence of free hæmorrhage from the bowel is of great rarity. Several authors have drawn attention to the difficulties which in some cases attend the differentiation of appendicitis and typhoid fever but none of these appear to mention the possible occurrence of free bleeding from the bowel in the former disease.

A man, aged 51 years, whose health had for some weeks been indifferent but who had never before complained of similar abdominal symptoms, was one day seized with pain in his abdomen. The pain was referred to the right iliac region and was accompanied by vomiting. The temperature was 102° F. and physical examination revealed some tenderness in the region of the liver and gall-bladder. The pulse was poor; it varied from 110 to 150, being accelerated by the slightest exertion. The conjunctivæ were yellowish and there was a considerable trace of albumin in the urine. Intermittent albuminuria had been present for some years. The patient had lived freely and in consequence of his symptoms was restricted to a milk diet and kept in bed. The pain and vomiting were very transient and at the end of a week his condition appeared to have greatly improved. A few days later he was allowed to get up and went into his grounds. This resulted in an alarming attack of faintness and led to his being seen on the sixteenth day of his illness in consultation with Mr. W. Cox of Winchombe, to whom we are indebted for many details. The patient's mental condition was quite clear. The temperature was 102·2° and the pulse was 120, intermitting occasionally. The respirations were 40. The tongue was clean and moist. No actual pain was present but rather a feeling of fulness in the abdomen. For several days there had been diarrhœa, but this was attributed to the use of Kutnow's powder. Just before he was seen there had been a smart hæmorrhage from the bowel, more than half a pint of bright blood being passed. This was shortly followed by a loose, peasoup-like, and very offensive motion.

On examination the abdomen was found to be rather prominent and more resistant on the right side than on the left. There was a moderate generalised œdema of the tissues of

the trunk and legs, but the œdema was certainly more marked in the iliac region and loin of the right side and here the skin was a little reddened, possibly from the attitude in which the patient lay. On percussion fixed dulness was obtained in the right loin and this extended well up to the base of the right lung, both in the axillary line and posteriorly. The breath sounds were rather faint at the base of the lung. The edge of the liver was felt below the ribs; it was not much enlarged, was not hard, nor was it tender. Tenderness was, however, complained of on deep pressure in the loin over the dull area. The spleen was not palpable and no typhoid spots were recognised. At night the patient was slightly delirious. 48 hours later the abdomen was more distended and tympanitic all over. Hæmorrhage from the bowel had twice recurred to the extent of half a pint of bright blood each time followed by some darker material. The abdomen was not tender and no fluid thrill of fluctuation could be obtained. The spleen could not be felt, but in the circumstances examination for it was not easy. There were still no rose spots. The nocturnal delirium continued and was more marked. The temperature was now 101·6° and the tongue was becoming dry.

Owing to the patient's condition a general anæsthetic was out of the question, so after due consideration it was determined to explore the right loin under infiltration anæsthesia. This was accordingly rapidly effected and the incision was carried down to the surface of the right kidney without evacuating any pus. Next morning a little more dark blood and some fæcal matter were passed by the bowel. The temperature had fallen to 98·4° but the pulse was 120 and intermittent and the quiet delirium was still present at night. The patient had been taking nourishment well throughout. On this day the result of the agglutinative reaction for typhoid fever was forthcoming and proved entirely negative. The nocturnal temperatures remained between 101° and 102°. Subsultus tendinum appeared. The abdomen remained distended but the patient suffered no pain. This was not due to narcotism, as during the illness only two small doses of Dover's powder and one injection of a quarter of a grain of sulphate of morphia were given. Strychnine and stimulants were used freely. Death occurred on the twenty-first day of illness.

Necropsy.—On opening the abdomen the most prominent object was the greatly distended and prolapsed V-shaped transverse colon with the omentum rolled up over it. Deep in the right iliac fossa was a discoloured and ragged abscess cavity, roofed in by œdematous omentum and containing a little pus. The appendix could not be recognised at all; it was either imbedded in the wall of the abscess or had sloughed right off. Along the outer side of the ascending colon was a series of comparatively recent adhesions with discolouration of the peritoneum. This track led up to a small deposit of fœtid pus which lay in the right kidney pouch between the kidney and the liver. The peritoneal area between the mesocolon and the mesentery was the site of a recent plastic peritonitis and the pelvic cavity contained a little pus. The hepatic flexure of the colon was discoloured and softened. It was adherent to both liver and gall-bladder and as soon as it was touched gas bubbled out. There was no trace of typhoid ulceration in either the large or the small bowel. The kidneys and liver were enlarged and probably fatty. The spleen was not much enlarged; it was soft and friable.

There are several points of considerable interest in this case, but our main object in recording it is to draw attention to the possibility of the occurrence of free hæmorrhage from the bowel in connexion with inflammation of the vermiform appendix. This rare complication, when it occurs, adds considerably to the difficulty in making a positive diagnosis. In our case although the signs seemed to point to appendicitis, yet the free hæmorrhage which occurred on the sixteenth and succeeding days of illness, together with the fever, nocturnal delirium, and extremely prostrate condition of the patient, caused grave suspicion that after all we might have to deal with a case of typhoid fever in which some peritoneal catastrophe had occurred. It is true that the temperature was not very high—102·2°—but severe intestinal hæmorrhage had occurred and was twice repeated. Of the temperature on the few days preceding the first hæmorrhage there is no record.

The unequivocal result of the agglutinative reaction for typhoid fever in this instance is an exceedingly good indication of its clinical value when properly performed, but such corroboration is hardly now needed. It is unfortunate that the exigencies of the situation prevented its earlier adoption. A curious feature throughout the course of the disease was the almost entire absence of pain after the first few days. Even firm pressure caused but little discomfort. This added to the difficulties of diagnosis, but in our experience it is not by any means unique in appendicitis. There was no opportunity of making a leucocyte count and even if made it is improbable that it would have yielded much information, since peritoneal infection even if the case were one of typhoid fever would have proved a disturbing factor. Although the vessel from which the hæmorrhage came could not be recognised at the necropsy, there can be no reasonable doubt that it was one of the branches of the superior mesenteric artery distributed to the hepatic flexure of the colon and that it was eroded by the collection of pus making its way into the bowel at this point.

The direction in which the suppuration extended within the peritoneum is the usual route taken when infection spreads upwards in the right lumbar region. In the recumbent position the pelvic brim is, so to speak, the watershed between the pelvic cavity and the loin, and an inclined plane leads along the ascending colon from this elevation to the right kidney pouch. The latter may not inaptly be compared to the gravy well of a dish and has the following boundaries: (erect position) *above*, the right half of the coronary and the right lateral ligaments of the liver; *internally*, the hilus of the kidney, the second part of the duodenum, the right aspect of the lesser omentum, and the foramen of Winslow; *externally*, the diaphragm and outside that the pleural sac and abdominal wall; *below*, the hepatic flexure of the colon and its attachment to the abdominal wall; and *anteriorly*, the renal impression of the right lobe of the liver. *The floor* of the pouch (in recumbency) is formed by the peritoneal aspect of the right kidney.

The peasoup-like and offensive motion which was passed soon after the first hæmorrhage and before the exploratory operation probably consisted of pus from the right kidney pouch and so accounted for the marked alteration in physical signs observed and also for the failure to evacuate pus when exploration was made in this locality.

SOIL NITRIFICATION *v.* THE INCIDENCE OF MALARIA AND OTHER MOSQUITO-BORNE DISEASES.

BY ARTHUR R. WADDELL, M.D. GLASG.

DURING the course of some experiments which I carried out upon the destruction of mosquito larvæ I was impressed by the deadly poisonous effect which attenuated solutions of ammonia had on them. Using the strong liquor ammoniæ (specific gravity 0·880) as a standard, a solution of 1 in 4000 proved absolutely fatal to mature larvæ. Solutions so much weaker sufficed to kill younger larvæ that I computed that the presence in water of such minute quantities as only 1 in 20,000 or 30,000 would be prohibitive to the life of those newly hatched. Unfortunately, I was unable, owing to the shortness of our mosquito season in this country last year, to verify fully this estimate. My experiments, however, went to indicate that ammonia is poisonous to mosquito larvæ in all its combinations, the nitrogen unit being the index of effectiveness. Following this up, I came to the conclusion that here we have a force of enormous potentiality in the crusade against malaria and one, moreover, which is capable of practical application. This force consists in the effective nitrification of the surface waters and vegetation through the medium of the soil, the former checking the existence of the larvæ and the latter being inimical to the adult mosquitoes.

Nitrification of the soil may be brought about in two ways, first, by the direct application of nitrogenous manures, and, secondly, by fostering the growth of certain plants belonging to the leguminosæ which are known by their peculiar root action to add to the nitrogen in the soil. As this peculiar property pertaining to this order of plants belongs more to the domain of agricultural chemistry than medicine it may be well if I explain that they react at their roots with certain earth bacteria, the result being the fixing in the soil of nitrogen from the atmosphere. They are accordingly referred to as nitrogen-fixing plants. The growth of these plants

may be encouraged and stimulated by the use of phosphatic manures and also by inoculating the ground and the seed to be sown on it with cultures of these earth bacteria referred to, which are sold commercially under the name of "nitragin." The bacterial organisms themselves are, however, the real nitrogen bringers or nitrifiers, the leguminosæ being dependent upon their presence at the roots for healthy growth. These organisms abound in all good cultivated soils in which there is a sufficiency of phosphates, potash, and lime, the last especially being of vital necessity to them, and they are most active at a temperature of about 99° F., cold and absence of moisture inhibiting them. Good cultivation assists them. It is possible with their aid to grow crops extremely rich in nitrogen on a soil which is otherwise almost devoid of nitrogenous elements. Their presence in a soil is indicated by the growth upon the leguminosæ roots of small nodules sometimes as large as a small pea.

Evidence of the inhibitory influence of ammonia upon certain other low forms of animal life is found in some facts bearing on the nematode worms which live parasitically in the alimentary tracts of horses, cattle, and sheep, and set up in the last two a fatal wasting disease characterised by scouring diarrhœa. This disease, known as parasitic enteritis, is found to be persistently associated with certain pastures (called "teart" lands in the West of England) upon heavy moisture-retaining soils, the larvæ, in fact, living in the damp earth of these pastures, in mud, &c., and being thence transferred to the stomachs of their definitive hosts.

Experimenting on the adult thread-worms (strongylus) from a horse, practically identical for purposes of experiment with those of cattle, I got the following results by immersing them in solutions of ammonia (specific gravity 0·880): a strength of 1 in 2400 killed in three minutes; one of 1 in 4800 killed in five minutes; one of 1 in 9600 killed in 14 minutes; and one of 1 in 15,000 killed in 22 minutes. In a solution of 1 in 30,000 they were all dead at the end of five hours, the controls being alive and very active at the end of 24 hours.

That the nitrogenous elements in the soil play an important rôle in limiting the incidence of this disease is evidenced by a report[1] upon certain investigations concerning the grass grown on two contiguous patches of land, one not associated with the occurrence of parasitic enteritis in cattle fed upon it and the other notorious in this connexion and described as one of the "teart" lands referred to. Samples of hay grown on the respective areas were analysed with the following result:—

Table showing the Results of Analysis of Grass dried at 212° F.

—	From sound land not causing parasitic enteritis.	From "teart" land causing parasitic enteritis.
	Per cent.	Per cent.
Total nitrogen...	3·57	1·877
Albuminoid nitrogen	2·41	1·20
Nitrogen as nitric acid... ...	0·0107	0·010
Total acidity	0·088	0·104
Non-volatile acidity	0·039	0·100

In the same journal, in a report[2] upon the Improvement of Permanent Pastures by the application of phosphatic manures and the consequent growth of nitrogenising plants, it is stated that "the quality of the herbage generally has been so far improved that whereas cattle stocked here were formerly liable to be severely scoured through eating the grass and herbage this ailment has steadily declined until at present he has not a single case of it." So much for indirect corroboration.

From our very doors, as it were, comes more direct support. I allude to the great decrease of malaria in England during recent years. It has been suggested that the improved drainage of the land has been largely responsible for this, but other factors have helped and amongst these the increased nitrogenisation of the soil by the widened use of phosphatic manures, the extended growth of clovers, and the enormously increased use of nitrogenous manures have played an important part.

Thus far I have only had under consideration the direct effect of nitrogen upon mosquito larvæ, but the increased nitrogen in the tissues of plants grown upon fully nitrogenised soils should also prove inimical to adult mosquitoes feeding upon their juices. In this connexion we have already seen that crops exceedingly rich in nitrogen can be produced by the aid of the earth bacteria.

Malaria is such a world-wide scourge and the problem of its mitigation is so urgent that no time should be lost in making practical tests to establish the most effective way of employing soil nitrification against its distribution. There is plenty of scope for doing so. The irrigation areas in India are a case in point. In these malaria, from causes which need not be here discussed, has increased with the irrigation. Parts of the Roman Campagna, too, lend themselves readily for the purpose. An area of the cultivable portion should be taken in hand, one part nitrogenised directly and another part dressed with phosphatic manures and heavily planted with leguminosæ. I have no doubt that the area which has the good fortune to be so treated will immediately benefit and experience a marked amelioration of its malarial conditions. A word at this juncture upon an economic aspect of the question. Soil nitrification has this advantage over the generality of hygienic applications, it is *per se* directly profitable, the increased yield of produce more than compensating for a proper expenditure in effecting it.

Before concluding I would like to say that I am well aware that not all bodies of water, great or small, in which mosquitoes are likely to breed can be directly affected from the soil. I know, for instance, that subterranean oozings, rain-water accumulations, &c., not carrying nitrogenous elements in any quantity, if at all, will continue to afford the insects the facilities which they require, that the flooding and consequent waste of nitrogen incident to tropical rain storms will continue to be counteracting influences to nitrogenisation, but the main principle will remain, and this is what concerns me, that effective soil nitrification, scientifically pursued, will all the time act against the existence of the mosquito.

Potters Bar.

[1] Dr J. A. Voelker, consulting chemist to the Bath and West and Southern Counties Society: Journal of the Society, vol. xiii., 1902-03, p. 155.

[2] W. Ashcroft and F. J. Rowbotham, ibid., p. 135.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

SECONDARY HÆMORRHAGE FROM THE RIGHT EXTERNAL ILIAC ARTERY FOLLOWING PERITYPHLITIC ABSCESS.

BY J. RAMSAY, M.S., M.B. MELB.,
SURGEON-SUPERINTENDENT, LAUNCESTON HOSPITAL, TASMANIA.

As severe secondary hæmorrhage from the external iliac artery is not common in perityphlitic abscess I have thought fit to report the following case.

A boy, aged 10 years, was admitted into the Launceston Hospital, Tasmania, on August 29th, 1902, with a swelling in the right iliac fossa extending upwards to an inch below the level of the umbilicus. A fortnight before this severe pains in this region and down the right thigh had come on with anorexia, constipation, vomiting, feverishness, and sweating. The right thigh was kept flexed. On Sept. 15th, under chloroform, an incision was made obliquely over the swelling, splitting the muscle layers, and from three to four ounces of pus were evacuated, as well as a sloughy soft tubular mass about an inch long, which may have been a piece of slightly dilated appendix. The cavity was extraperitoneal and extended from the brim of the pelvis up behind the colon for a short distance. Gauze and a rubber tube were inserted for drainage. The temperature remained about normal after the operation and the rubber tube was finally removed on the eighth day, a little gauze being placed in the cavity. On the ninth day after operation he was seen to be very pale and a large quantity of blood had saturated the dressings and bedding. By packing the wound tightly with gauze the hæmorrhage, evidently arterial, was controlled, the pulse being weak and rapid. Normal saline

enemata were given. On the eleventh day after operation the wound was re-packed gently; no fresh bleeding was taking place. That evening he had another severe arterial hæmorrhage from the wound which could be controlled by firm pressure over it. An anæsthetic was given; the wound was enlarged and the peritoneum was peeled up, but the hæmorrhage was so free that search for the bleeding point was impossible. It was controlled by pressure over gauze packing, whilst through a vertical incision, splitting the right rectus with the patient in the Trendelenburg position, the external iliac artery was ligatured transperitoneally just below its origin. There was no sign of a vermiform appendix on hasty examination. The vertical wound was closed with sutures and the old wound was explored. The severe hæmorrhage had ceased, but there was a little pumping from the distal part of a ragged sloughing portion of the external iliac artery which opened up the lumen of the vessel for about one and a quarter inches. A silk ligature around this distal part controlled the bleeding. The cavity was wiped with pure carbolic acid and packed with gauze. The pulse was 136, very small, and soft after the operation. The foot of the bed was elevated, the limbs were bandaged over wool, and normal saline enemata, six ounces, with liquid peptonoids and a little brandy, were given every two hours. A hypodermic injection of 5 minims of liquor strychniæ every three hours was ordered later, as his pulse appeared to be weaker. He gradually improved after this, though very anæmic. The vertical incision healed by first intention; the oblique one healed gradually and not completely till the silk ligature (placed distally to the ulcerated portion of the artery) came away on Nov. 14th. He was discharged convalescent about a month later.

Tasmania.

NOTES ON A CASE OF STRANGULATED LEFT DUODENAL (RETROPERITONEAL) HERNIA SUCCESSFULLY RELIEVED BY OPERATION.

BY PRIESTLEY LEECH, M.D., B.S. LOND., F.R.C.S. ENG.,
HONORARY SURGEON TO THE ROYAL HALIFAX INFIRMARY.

THE notes of this somewhat interesting case are as follows.

I first saw the case at 3 A.M. on July 15th, 1902, with Mr. J. A. Marsden of Lightcliffe. The patient was a finely built young fellow, aged 26 years, some six feet in height and very muscular. He had been playing in a cricket match on the 12th, and in the evening he had had a very hearty supper of beefsteak and peas. In the early morning of the 13th he was awakened by severe pain across the abdomen, vomiting following, and he could not get any action of his bowels. Mr. Marsden had attended him for a similar attack in the early part of April, 1902, and relief had been obtained by calomel; the patient had also had an attack in the beginning of the same year when the bowels had refused to act for two days. Neither of these attacks was so severe as the present one, the pain and vomiting being much more severe. The pain was very intense, became worse at intervals, and was only partially relieved by morphia. At 3 A.M., when I saw him, he was pretty deeply under the influence of morphia and complained even then of the pain coming on in spasms. He had passed neither flatus nor fæces since the 13th; the vomit had no fæcal smell, but was darkish brown in colour such as often precedes stercoraceous vomiting; the pulse was good and not quickened. The abdomen was moderately distended all over, but there seemed occasionally to be a more pronounced distension localised to an area in the middle of the abdomen and this localised distension and some peristalsis were more marked when the attacks of pain came on as if the distension and pain were due to local spasm of the intestine. The abdominal wall was somewhat rigid, but there was no marked abdominal tenderness. The temperature was normal; enemata had been given without effect. A diagnosis of probable intestinal obstruction was made and it was decided that if he were no better in a few hours operation should be strongly recommended. He was seen again about noon on the 15th. Turpentine and castor oil enemata had been given without avail and the last vomit was distinctly fæcal. Laparotomy was recommended and agreed to, no decision being come to as to the cause of the obstruction.

The abdomen was opened on the same afternoon and before opening it the localised distension before mentioned was more distinctly marked owing to relaxation of the abdominal muscles by the anæsthetic. This distension covered an oval area some seven or eight inches long by four or five broad; the long axis of the oval was placed somewhat obliquely from right to left across the middle line, the upper pole being to the right of the middle line below the liver. On opening the abdomen and pulling aside the omentum the small intestine was seen to be moving behind the mesentery and a diagnosis of retroperitoneal hernia was made. The opening of the hernial sac could not be felt, so the incision was enlarged upwards when it was found that a good portion of the small intestine was contained in a sac behind the mesentery; the mouth of the sac looked obliquely upwards and to the right with a slight forward inclination, the anterior and lower margin being thickened and arched. The finger was passed inside the sac and about a yard of intestine was withdrawn; the abdomen was then sewn up. The patient progressed without a single bad symptom and the stitches were removed on the twelfth day, but on the thirteenth day after a severe sneeze the patient felt something give way and on removing the dressing it was seen that the skin wound had been torn open except the upper two inches of the incision, the muscles being exposed. Chloroform was given and the wound was sewn together with a curved Hagedorn needle. Some suppuration took place and about a week later the patient complained of occasionally feeling what he described as a "puffer" going off under the dressings; two or three days later it was discovered that there was a small intestinal fistula which discharged wind and a small quantity of bile-stained fluid at intervals. Whether this was caused by the needle in the second sewing having perforated the small intestine or not I cannot say, but this seems the most likely explanation. The patient is now in good health and has had no further attacks of pain.

With regard to the diagnosis of the condition before operation I think a fairly accurate diagnosis might have been made had the condition of retroperitoneal hernia been borne in mind; to assist the diagnosis there were the history of two previous attacks of partial obstruction, the presence of a more or less central tumour, and the paroxysmal character of the pain; these would certainly suggest retroperitoneal hernia as the cause of the obstruction. Another point to which I should like to draw attention is the exact cause of the obstruction in these herniæ. Treves[1] says that when strangulation occurs it is always produced by the margins of the orifice of the sac. In this case it was not the orifice of the sac which was causing the strangulation, for the finger and thumb were introduced without much difficulty into the orifice and the intestine was fairly easily withdrawn, nor were there any marks of strangulation on the bowel. That the obstruction was due to volvulus or twisting of the bowel admits of no doubt. The sac in retroperitoneal hernia is a congenital condition and probably always contains more or less intestine; should the amount of intestine in the sac become increased and distended or should the intestine usually contained in the sac become more distended from some indiscretion in diet increased peristalsis occurs and twisting may easily take place leading to obstruction. Knaggs[2] has drawn attention to the occurrence of volvulus in hernia as a factor in causing obstruction and Moynihan[3] mentions that volvulus has been found in retroperitoneal herniæ. As the inferior mesenteric vein lies in the neck of the sac one would hesitate to cut the margin and for the same reason I did not make any attempt to close or to obliterate the mouth of the sac. Lastly, there is the question of nomenclature. Treves[4] gives some seven names for this hernia and too many names lead to confusion. It would be a gain if these herniæ clinically were called right and left duodenal hernia, leaving to the anatomists any discussion as to the exact fossa which forms the sac of the hernia. Moynihan[5] says the left duodenal hernia is in the fossa of Landzert and not in the fossa duodeno jejunalis. However this may be, I think it would be a distinct advantage if the terms right and left duodenal hernia were applied to these cases. The left duodenal herniæ are much more common than the right duodenal herniæ.

Halifax.

[1] Intestinal Obstruction, p. 111.
[2] On Volvulus in Association with Hernia, Annals of Surgery, April, 1900.
[3] Retroperitoneal Hernia. [4] Op. cit. [5] Op. cit.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv., Proœmium.

HOSPITAL FOR SICK CHILDREN, GREAT ORMOND-STREET.

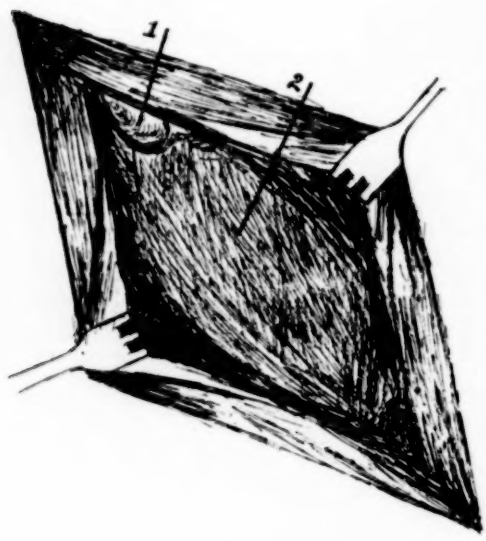
A CASE OF DOUBLE CONGENITAL HERNIA, WITH HERNIA OF THE BLADDER ON THE RIGHT SIDE AND HERNIA OF THE CÆCUM AND APPENDIX ON THE LEFT SIDE.

(Under the care of Mr. H. STANSFIELD COLLIER.)

FOR the notes of the case we are indebted to Dr. H. Y. Taylor, late house surgeon.

The patient, a boy, aged two years, fat and healthy-looking, was admitted to the Hospital for Sick Children, Great Ormond-street, for "double rupture." The following is a brief history of the case. There was no evidence of hernia at birth. A swelling in the left groin was first noticed when the child was six weeks old. The swelling was then of the size of a marble but gradually increased in size and at the end of a month it reached to the scrotum. At the age of five months a similar swelling appeared in the right groin and gradually increased in size until it reached to the scrotum. Various forms of trusses were applied by the medical attendant but were of little use. Between the age of six and eighteen months the child had occasional attacks of "colic" lasting for four or five hours. On these occasions the scrotum became more distended and tender to touch. The herniæ had never been irreducible and there had

FIG. 1.



1, Bladder. 2, Sac and contents.

been little or no constipation. There had been no difficulty in passing urine nor had anything abnormal been noticed in regard to micturition. On admission the child was found to have a very large double hernia filling up the inguinal canal and scrotum on each side. Both herniæ were easily reducible. There was a slight phimosis but urine was passed readily enough. The bowels were regular and the general health was excellent.

At Mr. Collier's request Dr. Taylor operated on the right-sided hernia. It was found to be a congenital hernia, the sac containing small intestine. The sac was dissected out and the contained bowel pushed up into the abdomen. There was difficulty in separating the sac from the surrounding tissues, as the former was very thin and tore readily. There was then found to be an apparent thickening of the sac at its upper end extending from the neck of the sac for three-quarters of an inch along its inner aspect. On examination this proved to be due to a para-peritoneal hernia of a portion of the bladder (Fig. 1). This was not closely adherent to the sac and was easily loosened from the tissues in which it was lying and pushed gently back into the abdomen. The sac was then ligatured, the pillars of the ring were brought together by silkworm gut stitches, and the operation was completed in the ordinary way. The child made a straightforward recovery. It is important to note that there had been nothing in the history of the case or in the local condition to lead one to suspect before operating that there was a hernia of the bladder.

Three weeks after the first operation Mr. Collier operated on the left-sided hernia. The sac was exposed and opened and the contents were found to consist of cæcum, appendix, an inch of ascending colon, and two inches of ileum (Fig. 2). The appendix was

FIG. 2.

Sac laid open showing contents.

quite healthy and two inches long. The contents were pushed back into the abdomen, the sac was ligatured, and the operation was completed. Recovery was straightforward. Two weeks afterwards circumcision was performed and a week later the boy was discharged well.

WATTON COTTAGE HOSPITAL.

A CASE OF CHRONIC ULCERATION OF THE STOMACH COMPLICATED BY HAIR-BALL.

(Under the care of Dr. H. MALLINS.)

A WOMAN, aged 22 years, was admitted into the Watton Cottage Hospital on April 12th, 1902, suffering from gastric symptoms. With regard to her previous history the patient,

though of weak intellect, had worked as a domestic servant since the age of 15 years. She seemed to have enjoyed fairly good health until the last two years when indigestion troubles began. In October, 1901, she was obliged to leave her situation owing to frequent attacks of sickness and pain after food. Shortly before her admission she vomited a small quantity of blood. A brother had died from acute pulmonary tuberculosis about ten years previously; with that exception the family history was good.

On admission the patient was found to be extremely emaciated and anæmic. The pulse was weak and the temperature was subnormal. The patient's chief complaint was of pain in the left side of the abdomen below the ribs and sickness. On examining the abdomen a large tumour of somewhat rounded outline, the area of which could be covered by an ordinary soup-plate, was at once perceptible. By palpation and percussion its outline could be traced from the tip of the ensiform cartilage to a transverse line running two inches below the umbilicus. Its right edge, which was the most prominent, could be felt extending into the hypochondriac region about two and a half inches from the middle line. The left margin was ill-defined and its percussion dulness seemed to merge into that of the spleen. The tumour was very firm on pressure and quite free from tenderness with the exception of its extreme left margin. It could be easily caught between both hands and moved from side to side. No pain except after food was complained of, and this was never excessive and was invariably relieved by vomiting, which, as a rule, occurred some hours after food. All the other organs of the body seemed to be healthy. The abdominal measurement over the most prominent part of the tumour was 24 inches. A soda and bismuth mixture was prescribed and a milk diet. Normal menstruation occurred on April 17th. On May 12th the patient's condition was as follows. There was no change in the tumour. The vomiting continued as before. It generally occurred during the night, some three or six hours after the last food partaken of. This food returned in a pulpy mass with very little moisture. The bowels acted regularly but the stools were very offensive. On August 23rd there had been no change since the last report except an increase of the emaciation and weakness. Slight œdema of the ankles was noticeable. On Sept. 1st the abdomen was more distended and measured 26 inches over the tumour. There was a tendency to diarrhœa, three or four offensive stools being passed daily. The œdema of the legs had increased. The skin surface was nearly always cold and the pulse was almost imperceptible. On Oct. 14th the patient died at 7.30 P.M.

Necropsy.—At the post-mortem examination on opening the abdominal cavity it was at once apparent that the tumour observed during life was the much distended stomach, which filled the upper part of the abdomen. Its lower border was firmly adherent to the transverse colon. There was also a slight adhesion between its cardiac end and the parietal peritoneum in the vicinity of the spleen. The general outline of the stomach might be compared to that of a large U-shaped tube placed horizontally, the upper limb, by far the bulkier of the two, comprising the cardiac end and middle third, and the lower and much narrower limb being constituted by the pyloric end and the upper four inches of the duodenum. On opening the stomach its distending contents were seen to be a mass of black hair (weighing 1 pound 9 ounces) reaching from the cardiac end, completely filling its cavity and extending through the dilated pylorus into the duodenum. On removal of this hairy mass the walls of the stomach were found to be much thickened and the seat of several large chronic ulcers. The largest of these was situated on the greater curvature, at the junction of the middle and pyloric thirds, being oval in outline and measuring 3½ inches by 2 inches. Its floor was formed entirely by the thickened wall of the transverse colon. The edges of the ulcer were rolled inwards and undermined by the contraction of the fibrous tissue. In its vicinity there was a discoloured patch of mucous membrane marked with black striæ. This presumably was the spot on which the heaviest end of the hairy mass rested, its black hue being due to the colouring matter of the hair. Two smaller rounded ulcers were seen on either side of the smaller curvature near the cardiac orifice. One of them had perforated the gastric wall and its floor was formed by the adherent pancreas; the other was still bounded by the serous coat of the stomach. In addition to these ulcers the scars of two more that had healed were noticed on the anterior wall and some three or four small but deep excavations in the vicinity of the concave border. All the other abdominal viscera were found to be healthy.

Remarks by Dr. MALLINS.—The different views of the nature of the tumour taken during life—viz., retroperitoneal sarcoma, pancreatic cyst, and tuberculous enlargement of glands—are seen in the light of the necropsy to have been incorrect. The expediency of an exploratory operation was several times discussed, but the extremely feeble state of the circulation was considered to be prohibitive. Had such an operation been attempted it is extremely doubtful if recovery would have taken place in view, of the very unhealthy condition of the stomach walls. An interesting question arises in connexion with the case—viz., did the hairy mass produce the ulcers by its pressure or was their origin distinct? I am disposed to take the latter view, chiefly owing to the fact noticed at the post-mortem examination that at the point where, judging from the staining of the gastric wall, the chief weight of the mass impinged there was no breach of surface. It is not improbable that the ulcers produced a morbid craving which led to such an unnatural method of trying to appease it. The case teaches two lessons: (1) in tumours of the gastric region the possibility of hair-ball distension should not be overlooked; and (2) in all doubtful cases where the patient's strength is equal to it an exploratory operation should not be omitted.

Medical Societies.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

Exhibition of Cases.

A MEETING of this society, which partook of the nature of a clinical demonstration, was held recently under the chairmanship first of Sir T. R. FRASER and then of Dr. C. W. UNDERHILL.

Mr. ALEXANDER MILES showed a patient who illustrated the Comparative Results of Chopart's and Syme's Amputations. Both feet were cut off as a result of an accident on the railway and the right ankle showed that with Chopart's operation there was a greater width given to the extremity with resulting benefit in walking. As regarded the adaptation of artificial limbs, the patient stated that the left ankle with Syme's stump was the more comfortable of the two.

Mr. MILES also showed four patients who had been operated upon for Perforated Duodenal Ulcer. The first was a female, aged 21 years, who had been operated upon three years previously. There was no antecedent history of ulceration of the stomach or duodenum. A week before her admission to hospital she had complained of slight pain in the right hypochondrial region. This passed off, but just before her admission it had occurred with great severity and she soon became collapsed. On admission her pulse was 94 and her temperature was 99° F.; the liver dulness was completely lost. The operation was performed 20 hours subsequent to the rupture and consisted in cutting through the right rectus muscle and so getting access to the duodenum, in the first part of which a perforated ulcer was situated. Fluid was present in the pouch of Douglas. The second case occurred in a man, aged 52 years, who was suddenly seized with intense abdominal pain; there was no loss of liver dulness in this case. Under the right lobe of the liver there was an area of extreme tenderness and the maximum degree of pain was elicited here. There was no distinct fulness palpable. The operation was performed four hours after the arrest of severe symptoms. On opening the abdomen there was an escape of bile-stained fluid and white flocculi resembling curdled milk. No fluid was present in the recto-vesical pouch. A drain was inserted over the pubes. The third patient was a man, aged 39 years. On Oct. 25th, 1901, he had been doing hard work which necessitated his climbing over or under fences, and on returning home he partook of a hearty supper. At 11.30 P.M. he was suddenly seized with intense abdominal pain. The operation was performed 15 hours after the perforation and was followed by a good recovery. The fourth patient was a man, aged 26 years, who had been operated on five years before. He had previously suffered from dilatation of the

stomach and had occasionally to wash it out. While at work he was suddenly seized with intense pain. The operation was performed two hours after the rupture. The right rectus was cut obliquely across so as to allow of better access to the duodenum which it certainly did, but the difficulty in suturing the muscle was so great that Mr. Miles had never repeated this oblique incision. The patient was fed on the fifth day by the mouth. He occasionally has to wash out his stomach but is otherwise in perfect health. Mr. Miles said that he had operated on four other patients for similar disease but unsuccessfully; in three of them the intervals between rupture and operation were respectively 18½, 60, and 54 hours; in the fourth the interval could not be ascertained. This gave an operation recovery of 50 per cent.

Mr. C. W. CATHCART showed the following cases for Mr. F. M. CAIRD:—1. A woman after removal of a Gastric Carcinoma. She was operated upon on June 7th, 1902. A large mass grew from the stomach and was so adherent to the colon that it could not be separated. Six inches of the transverse colon and one-third of the stomach were removed and the patient was now in excellent health. 2. A woman who had suddenly been seized with acute abdominal pain simulating acute appendicitis. At the operation the gall bladder was found to be gangrenous and contained a calculus. These were removed and the patient is now well.

Mr. CATHCART also showed the following cases:—1. A man on whom laminectomy for paraplegia had been performed. After Dr. MacEwan had introduced the operation it was at first thought that all such cases of paralysis due to spinal disease could be cured by laminectomy, but it was soon found that only a small proportion could thus be benefited. The disease in this case was situated about the eleventh or twelfth dorsal vertebra and caused complete sensory and motor paralysis. On removing the prominent laminæ the dura mater was found to be in close contact with them and the spinal cord appeared to be compressed. The dura mater was not opened and before the operation was completed the cord had regained its normal appearance. The patient complained of great pain after the operation, but had gone on steadily improving and could now draw up his legs and could locate sensory impressions. The wound was quite healed. The paralysis was complete from July, 1902, to April, 1903. 2. A female exhibiting the results of an unusually severe Whitlow. In spite of baths and the local application of ichthyol, the inflammation and swelling ran up the arm and no benefit was obtained from free incisions. In a few days the whole inflamed area suddenly became the seat of purulent foci and abscesses formed in the right shoulder joint, in the front of the chest, and in the leg. It was decided to amputate at the elbow and for a few days the patient's life was in great danger. A streptococcus was isolated but it did not seem to grow in the usual manner. 3. A patient after short circuiting the small intestine on account of a Fæcal Fistula. 4. A patient in whom Epithelioma had developed on the seat of lupus scars on both sides of the neck.

Dr. ALEXANDER JAMES showed (1) a girl, aged 13 years, who had suffered from so-called Acute Labyrinthitis (Voltolini); and (2) a boy, aged seven years, with similar acute symptoms but associated with Blindness and Optic Nerve Changes. In 1866 Voltolini described this disease as occurring almost entirely in children and as having the symptoms of an acute specific fever, the pain being chiefly in the ears and the back of the head and associated with either insensibility or convulsions. In about a week the patients begin to improve but complain of deafness and giddiness. The latter passes off but the deafness remains and is almost always absolute and complete. Voltolini described it as due to acute labyrinthitis and a good many of such cases had been recorded since. It was now, however, more generally believed to be an abortive form of epidemic cerebro-spinal meningitis. The girl was seized with the illness in December, 1902, and complained of fever and severe occipital headache, great pain on moving the head, with stiffness of the muscles of the back. She had almost constant vomiting and became comatose in two or three days. She recovered in about ten days but her hearing was greatly impaired and she soon became completely deaf. The boy was also suddenly seized with sickness, vomiting, and headache. He had been perfectly healthy previously. The right eye first became affected and the pupil was greatly dilated and later the left eye followed. The blindness was almost complete. When admitted to hospital on March 7th he complained of frontal headache; both pupils were widely dilated and did not react to light. Conjugate movements to the right were slightly impaired but there was no definite change in the fundus of the eye. The nasal secretion was examined but no organisms were found. On the 21st he was in good health but distinct evidences of commencing optic nerve atrophy were seen in both eyes. Later the vision began to improve, whilst the optic atrophy advanced. These two cases were both evidently due to the same disease, the toxin in the one case affecting the nuclei of the auditory nerve whilst it affected the nuclei of the optic nerve in the second.

Mr. H. ALEXIS THOMSON exhibited the following cases:—1. A boy after operation for Osseous Ankylosis of the Jaw. He had suffered from a stiff jaw for seven years and it was said to have been initiated by a blow. The ankylosis on the left side had arrested the development of the lower jaw as a whole. The incision was made over the left condyle and the condyle and the greater part of the ramus, as well as the condyloid process had to be removed before free movement could be obtained. There was now complete movement, though the jaw still remained small. 2. Two female patients after Excision of the Shoulder-joint for Tuberculous Disease after the method devised by Kocher. Though two and a half years had elapsed since the excision the movements of the arm in both cases were very restricted. The glenoid cavity and the upper end of the humerus were removed and so absolute ankylosis had resulted and any movements were made through, or restricted by, the shoulder-blade. The disease in both cases had been absolutely cured.

Dr. GEORGE A. GIBSON exhibited a male patient suffering from Addison's Disease and presenting an intense degree of pigmentation of the mucous membranes.

Dr. NORMAN WALKER showed a series of cases of Lupus to demonstrate the permanence of cure induced by the x-ray treatment.

EDINBURGH OBSTETRICAL SOCIETY.

Tracheal Compression in an Infant.—Deciduoma Malignum.—Cyst of the Labium Minus.

A MEETING of this society was held on May 27th, Dr. JAMES RITCHIE, the President, being in the chair.

Dr. ANGUS MACDONALD read notes on a case of Fatal Tracheal Compression by Enlarged Thyroid in a Newly-born Infant. The infant was born at eight months, about 10 minutes before the medical man arrived. He found the child in an advanced stage of asphyxia, but after performing artificial respiration the breathing became established to some degree; rhythmic traction on the tongue acted most beneficially in producing this result. But the manifest difficulty in the respiration led to a close examination of the neck, when he found the thyroid enlarged, its lateral lobes being of the size of a marble and of firm consistence. The breathing became more laboured, the lower ribs being drawn in with each inspiration, and by four hours after birth the infant was evidently in such a serious condition as to require operation, but death occurred during the performance of tracheotomy. It was noticed that the thyroid was covered with a network of congested veins and that the lobes seemed to swell as the body was more cyanosed. These cases are rare. Dr. J. W. Ballantyne had recorded a fœtus between the third and fourth months which exhibited a general congestive enlargement of the tissues of the neck between the lower jaw and the manubrium sterni. A case was recorded by Sir J. Y. Simpson in 1855; the child was the tenth of a non-goitrous woman and on account of the pressure of the goitre died in eight hours. The goitre was as large as a hen's egg and caused forehead presentation. Another case was recorded by Keiller in 1855 in which a large irregularly lobulated swelling in the region of the thyroid gland gave trouble by causing forehead presentation. A case was recorded by Dr. A. R. Simpson in 1866, when the mother had been taking chlorate of potassium throughout pregnancy for the prevention of miscarriage and premature labour; the thyroid seemed to be equally enlarged in its isthmus and lateral lobes. At first there was difficulty of respiration and deglutition but at the age of four years the tumour was much shrunken and the child appeared healthy. In Dr. Macdonald's case the mother had been taking chlorate of potassium during the pregnancy from the second month; neither parent had any thyroid enlargement.

Dr. W. E. Fothergill of Manchester had recently had a similar case, and also Dr. J. T. Hewetson of Birmingham, and in both chlorate of potassium had been administered.—Dr. J. W. BALLANTYNE, Dr. D. BERRY HART, Dr. H. O. NICHOLSON, and the PRESIDENT discussed the paper.

Dr. J. M. MUNRO KERR (Glasgow) gave the clinical history of a case of Chorion Epithelioma (Deciduoma Malignum). The patient was 23 years of age and was first seen in May, 1902, suffering from pains in the abdomen and hæmorrhage from the uterus. There was a history of miscarriage in September, 1901, and she had been curetted in March, 1902, which was followed by constant bleeding. In May she was extremely anæmic with a pulse over 130 and her temperature varied from 103° to 105° F. The uterus was again curetted and some masses were removed, but these were unfortunately not preserved for examination. The temperature fell from 106° to normal in 12 hours after the operation but rose again slightly afterwards. During the next month she had a sharp metrorrhagia and the temperature then began to show an evening rise which was considered to be due to sepsis and intra-uterine douching was carried out but with no benefit. At the end of July she came under Dr Kerr's care and on exploring the uterus with the finger he found a large rough mass towards the fundus which bled very freely. As it was evidently a case of deciduoma malignum he removed the uterus but the patient died the same evening. A post-mortem examination was refused but during the operation the broad ligaments were freely moveable and no enlarged glands were felt.—Dr. JOHN H. TEACHER (Glasgow) gave a pathological report of the specimen with lantern slides. The tumour occupied the fundus and posterior part of the uterus and was of about the size of a five-shilling-piece; it was covered with mucous membrane partly ulcerated. Microscopically it showed the typical structure of a chorion epithelioma but with an unusual amount of the cells which are regarded as transition forms between the Langerhans layer of the tumour and the syncytium.—Dr. F. W. N. HAULTAIN, Dr. BERRY HART, and Dr BALLANTYNE discussed these papers.

Dr. JESSIE M. MACGREGOR read notes of a case of Cyst of the Labium Minus. The patient was 28 years of age, unmarried, and healthy except for marked neurasthenic symptoms. She had noticed a small growth in the vulva for at least three years; it was painless, caused no symptoms, and had not increased in size during the last 18 months. Its presence caused her much anxiety. It was situated in the posterior third of the left labium minus or more correctly in the interlabial sulcus with its main portion in the labium minus; it measured three-quarters of an inch by half an inch, had a bluish cystic surface, and was freely moveable. It was not painful but on account of the mental worry it produced it was deemed advisable to remove it. On incision clear serous fluid escaped and the cyst was found to be incompletely filled with a papillary growth which had all the macroscopic appearances of an ovarian papillary cystoma. There had been no recurrence after its removal last September. The general health improved very much after its removal.—Dr. BERRY HART made remarks on the paper.

HARVEIAN SOCIETY OF LONDON.—A meeting of this society was held on May 21st, Dr. W. Winslow Hall, the President, being in the chair.—Dr. E. Laming Evans showed an infant with Swelling of the Right Foot. The swelling involved the four outer toes and the dorsal and plantar surfaces of the foot to the level of the bases of the metatarsals and was for the most part firm and solid. The three middle toes were webbed and there was increase in the circumference of the leg and of the right buttock. The thigh appeared to be normal. A skiagram showed that the phalanges of the four outer toes were expanded, that the second and the third were irregularly placed, and that the third phalanges of the third and fourth toes were conjoined. The rest of the bones were normal. Probably the case was one of congenital hypertrophy involving vessels, nerves, bones, muscles, and fibrous tissues, the chief characteristic being hyperplasia of the subcutaneous tissue with special involvement of the lymphatics. Other possibilities were fibrochondroma or nævo-lipoma. The treatment suggested was dissection of the growth from the dorsal and plantar surfaces with removal of the fifth metatarsal bone and all the phalanges, leaving the great toe intact.—Mr. Francis Jaffrey thought the case likely to be one of nævo-lipoma.—Mr. T. Crisp English considered that the child was suffering from congenital hypertrophy, especially as the calf and buttock on the same side were also hypertrophied.—Mr. English showed a girl, aged five years, with a Congenital Facial Cleft. An operation had been previously performed but no further particulars could be obtained. The cleft extended from the right side of the upper lip to the inner canthus. The right side of the nose and the right nostril were completely absent and the palate was very highly arched. The question of improvement in appearance by a plastic operation or by the injection of paraffin was discussed.—Mr. English also showed a woman, aged 30 years, suffering from a large Desmoid or Fibrous Tumour of the Abdominal and Thoracic Walls. The patient had had one child. The tumour had existed for eight years and at the present time occupied the greater part of the anterior abdominal wall and extended upwards over the thorax, involving the left breast.—Dr. Alexander Morison showed a case of Mitral Valvular Disease with much Hypertrophy of the Heart and probably adherent pericardium, in which he considered that the chief mechanical difficulty was the reflux of blood through the auriculo-ventricular orifice and some virtual stenosis of the same from enlargement of the ventricular cavity. He showed the patient on account of the wide area of audibility of the systolic bruit. There was also a palpable thrill. The bruit could be heard in the back as low down as the sacrum and in front at the pubes but not in the femoral arteries. The second sounds at the base were normal and could at times be heard to reduplicate at the level of the fourth left costal cartilage. Sphygmograms showed a well-marked aortic notch and cardiograms showed the flat top of systole from a hypertrophied ventricle.—Mr. Jaffrey showed a man, aged 47 years, with Œsophageal Obstruction. There had been difficulty in swallowing for about three months and the patient's condition was becoming worse so that he could only swallow fluids. He asserted that some ten days previously he vomited a pint of bright blood. The day after admission to hospital he brought up seven or eight ounces of bright blood and immediately afterwards he could swallow with greater ease. A bougie passed 12 inches and impinged on what appeared to be a hard growth. Owing to the bleeding, however, it had been suggested that the obstruction might be due to a leaking aneurysm. During a week in hospital the man had increased six pounds in weight. No sign of aneurysm was apparent by the x rays. Mr Jaffrey considered the case to be one of carcinoma and proposed to perform gastrostomy when the patient's condition became worse.

NORTH OF ENGLAND OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY.—A meeting of this society was held on May 15th, Dr. J. E. Gemmell, the President, being in the chair.—Specimens were shown by Dr. J. B. Hellier (Leeds), Dr. E. O. Croft (Leeds), Dr. W. Walter (Manchester), and Dr. D. Lloyd Roberts (Manchester).—Dr. W. McGregor Young (Leeds) read notes of a case of Acute Mercurial Poisoning from Intra-uterine Injection. The case was of special interest because it was complicated by retention of a piece of placenta in utero. The delicate anæmic patient had been ill more or less throughout her fourth pregnancy. Retention of the placenta after delivery with forceps necessitated manual removal, which was followed by an intra-uterine douche of a 1 in 3000 solution of biniodide of mercury followed by one of plain water. On the tenth day there set in indications of sepsis and a bit of placenta was removed from the uterus. Later the classical symptoms of acute mercurial poisoning became well marked. Further exploration of the uterus disclosed another piece of placenta which was removed. By the nineteenth day the patient was progressing well, but a recurrence of the mercurial symptoms took place. Ultimately the patient made a good recovery. Salivation and stomatitis were absent throughout, but there were soreness and stiffness of the jaws preventing mastication, severe headache, coppery taste in the mouth, and severe purging and tenesmus.—The President remarked that solutions made by the dissolving of compressed drugs were apt to be imperfectly mixed if used hurriedly, the solution at the bottom of the vessel being much stronger than that higher up in the same vessel.—Dr. Croft thought it was unnecessary to advance trauma as the explanation of the symptoms that had been described. He agreed with the President's remarks anent the imperfect solution of powders and commented on the difficulties in distinguishing the diarrhœa of sepsis from that due to mercurial poisoning.—Professor C. J. Wright (Leeds) said

that for some years he had used mercurial solutions in no greater strength than 1 in 5000 or 1 in 6000, and then only with the greatest care. He considered that weak boric or carbolic acid solutions were better for intra-uterine use than sterilised water.—Dr. Young, in reply, referred to a paper by Professor C. R. Marshall (St. Andrews) on poisoning by mercurial solutions in obstetric practice.—Dr. A. C. F. Rabagliati (Bradford) read a paper on the Causes and Prevention of Cancer. After a brief review of the principal theories at present before the profession Dr. Rabagliati propounded his own view that cancer is from first to last a disease of over-feeding. He adduced many closely reasoned arguments in support of this theory and indicated the lines of treatment to be followed on its basis.—The President complimented Dr. Rabagliati on this paper and remarked that well-nourished persons were more often attacked by malignant disease than those less well nourished.—Dr. Roberts and Mr. C. Richardson (Leeds) also spoke and Dr. Rabagliati replied.

BRADFORD MEDICO-CHIRURGICAL SOCIETY.—A meeting of this society was held on May 19th, the President, Dr. H. J. Campbell being in the chair.—Cases and specimens were shown by Dr. Andrew Little, Mr. J. Basil Hall, Mr. C. F. M. Althorp, and Dr. W. Mitchell.—Dr. Mitchell read notes on two cases of Disease about the Hip joint. The first case was that of a boy, four and a half years old, who had been treated for two years for supposed hip disease. The affected limb was an inch longer than the other. The tissues were swollen about the upper part of the right thigh and there were numerous sinuses leading down to bare bone. The mobility of the hip-joint was much diminished. The sinuses were first treated by injections of biniodide of mercury (1 in 1000) and afterwards of hydrozone. After 18 days of this treatment the patient was much improved in health. Chloroform was then administered and the sinuses were slit up and freely curetted. No disease of the hip-joint was detected; an area of bare bone on the shaft of the femur was chiselled away. The patient did well and all the sinuses were healed in five weeks. The boy was walking well without assistance except that he had a thickened sole for the boot of the *sound* side. Dr. Mitchell remarked on the efficacy of the hydrozone as an injection for foul sinuses; he said that owing to the gas liberated necrotic material was driven forcibly out of the sinuses. The second case was one of hip-joint disease in a woman, aged 42 years. She was suffering from hip-joint disease of three years' standing and was greatly reduced by hectic fever. After preliminary treatment of the sinuses, as in the preceding case, excision of the hip-joint was performed by the posterior incision. The result was good and the patient was walking with a crutch five months after the excision of the hip-joint.—Dr. J. Jason Wood read a paper on the Treatment of Certain Cases of Procidentia Uteri. The treatment was applicable in severe cases of complete procidentia where the woman had passed the child-bearing age; it consisted in removing the uterus by vaginal hysterectomy and, either at the same time or subsequently, performing anterior colporrhaphy together with an extensive repair of the perineum. The treatment was efficient as to result and, while not more dangerous than ventrofixation, was more certain to cure. Hysterectomy alone was not sufficient, though giving much relief to the patient, as the bladder was apt gradually to prolapse again after a time.

GLASGOW OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY.—A meeting of this society was held on May 27th, Dr. J. Nigel Stark, the President, being in the chair.—Dr. Robert Jardine showed a Child born by a Breech Presentation who only lived a few hours and who had Various Deformities, External and Internal. The external genitals were those of a male but the penis was impervious and the scrotum was empty. The abdomen contained a large tumour which before death was thought to have been a distended bladder. The tumour was found to be cystic and to contain a turbid mucoid fluid which was devoid of fat but contained many cells similar to the seminal cells which secrete the fluid part of the semen. On either side of the tumour were a tube and ovary. The kidneys were cystic, especially the left. The right kidney had no ureter attached. The child was probably a transverse hermaphrodite.—Dr. A. Louise McIlroy showed, for Dr. Kelly, a large Tumour of the Uterus which had been diagnosed as fibroid complicated with malignant disease of the omentum. On section the whole tumour was found to be attached to the uterus and on microscopic examination part was found to be malignant.—Dr. Carstairs C. Douglas demonstrated Saul's Test for determining whether Milk had been Sterilised or not. The amount of pasteurisation which vitiated the test was noted. The test was considered to depend upon the presence of a ferment in the milk which was destroyed by boiling.—Mr. S. Stuart Nairne read a paper on Menstrual Epilepsy. A number of cases were said to have been so much improved that no fits had been noted during a period of even five years. The treatment advocated was dilatation of the cervix in cases of stenosis, curettage, the application of the actual cautery to the fundus, and removal of the ovaries if diseased.—Dr. Adamson, Dr Douglas, Dr. MacLennan, and the President discussed the paper, the consensus of opinion being that the epilepsy had nothing to do with the menstrual phenomena and that disease in the pelvis ought to be treated on its own account.

PATHOLOGICAL SOCIETY OF MANCHESTER.—A meeting of this society was held on May 13th, Dr. J. J. Cox being in the chair.—Professor E. F. Trevelyan of Leeds read a short paper entitled "Some Remarks on Two Cases of Acute Miliary Tuberculosis."—Mr. W. P. Montgomery showed two specimens of Intussusception of Meckel's Diverticulum. In each the infolding of the process had originated an ileo-colic intussusception. The first specimen had already been exhibited a year previously to the Society for the Study of Disease in Children. At that time six or seven cases alone could be found, while during the last few months the number had increased to nearly 20. The decided inference was that many cases were overlooked either at the operation or at the necropsy.—Mr. W. P. Gowland showed (by permission of Mr. D. J. G. Watkins of Lincoln) a specimen of the Uterus, Vagina, and Two Testicles removed from the Scrotum of a Man with symptoms resembling those of Strangulated Hernia. The patient had worn a truss since childhood for a rupture (?). On Feb. 18th he was seized with acute pain in the abdomen associated with vomiting. When admitted to hospital the left half of the scrotum was empty and shrivelled and the external ring was very small. In the right half were two masses diagnosed as testicles. Between these was a third hard mass which was found subsequently to be a uterus from which a long narrow vagina passed into the pelvis without any apparent communication with the bladder or the rectum. The whole was inclosed in a sac containing fluid and no prostate could be felt per rectum.—Mr. Smith mentioned a case of Duodenal Stenosis for which Gastro-enterostomy was performed.—Several preparations were exhibited as card specimens.

BRITISH BALNEOLOGICAL AND CLIMATOLOGICAL SOCIETY.—A general meeting of this society was held at 20, Hanover-square, W., on May 21st, Dr. E. Symes Thompson, the President, being in the chair.—The officers and council for the ensuing session were unanimously elected. The report of the council on the state and prospects of the society was read and adopted.—Dr. George Oliver (Harrogate) gave an address entitled "A Few Jottings in Physiological Medicine," in which he sketched the results of recent inquiry on the effects of digestion, exercise, temperature, and altitude on the arterial, capillary, and venous pressures. He showed that each meal produced a prolonged wave-like disturbance in the arterial and capillary pressures which was traceable for a period of from two and a half to four hours and which persisted through the temporary variations of the blood-pressure induced by other causes, such as exercise, temperature, &c. The response of the circulatory mechanism to thermic variations of the weather was illustrated by daily records of blood-pressure and atmospheric temperature for three months during the past winter. The effects of altitude on the arterial pressure in winter observed during a recent visit to Switzerland were shown to be a lowering of that pressure in the medium altitudes (from 1000 to 4000 feet) and a raising of it in the higher altitudes (from 4000 to 8000 feet), the rise being due to a compensation caused in an increase of the output of the heart and of the arterial tonus.—On the same evening the annual dinner was held at the Monico Restaurant, Piccadilly-circus, the chair being taken by the President. Dr. Robert Barnes and Dr. T. Henry Green were guests of the society.

BRIDGWATER RURAL DISTRICT.—At the meeting of the Bridgwater rural district council held on May 26th it was stated that the Local Government Board had given its sanction to the council's application for a loan of £23,960 for carrying out a water-supply scheme.

Reviews and Notices of Books.

Practical Handbook of the Pathology of the Skin: an Introduction to the Histology, Pathology, and Bacteriology of the Skin, with Special Reference to Technique. By J. M. H. MACLEOD, M.A. St. And., M.D. Aberd., M.R.C.P. Lond., Assistant in the Dermatological Department, Charing Cross Hospital; Physician to the Skin Department, Victoria Hospital for Children. With 8 Coloured and 32 Black-and-white Plates. London: H. K. Lewis. 1903. Demy 8vo, pp. xxiv. + 408. Price 15*s.* net.

THERE is no other tissue or organ of the body in which the onset and course of pathological processes can be seen and felt as they can be in the skin. In this structure we find laid out before us all the various stages and forms of inflammation, and the skin might be much more utilised than is the case at present for the instruction of the student in the elementary and even in the more advanced pathological processes. In the skin, too, we have the combination of an avascular tissue, the epidermis, with one well supplied with blood-vessels, the derma; and by the study of inflammation in the skin the form it takes in avascular as well as in vascular tissues can be clearly seen. The work before us is an attempt—and after careful examination we may say a highly successful attempt—to put before dermatologists, and especially students of dermatology, a handbook which will assist them in carrying out the histological and bacteriological examination of the skin. It gives a very full account of the processes employed in the investigation of the skin both in health and in disease. It does not confine itself to a mere description of the methods used but enters into details as to the appearances of the structures examined and the objects seen. The illustrations are especially deserving of praise; they are clear and distinct and are for the most part due to the graphic skill of the author.

We are so very satisfied with the book that we have not been able to find material for a detailed criticism of the work, but on one or two points we may say a word. Dr. Macleod gives a very good account of the mode of performing "biopsies," or the removal of small portions of skin during life for the purpose of microscopic examination, but he does not mention Piffard's cutisector which is a useful little instrument introduced some 30 years ago. The author refers to "skin punches" as "recently" devised; they were first introduced by Watson in 1878, though not for "biopsies." We must also take exception to the statement that it is "almost universally admitted" that the "psorosperms" of Paget's disease are merely degenerative epithelial changes.

The book will be of great value to the diligent student of dermatology, but even the experienced dermatologist will find it convenient to have it at hand for consultation when dealing with any unusual point in the pathological histology of the skin. We know no other work in any language written on the same lines, though Max Joseph's little work, "Dermatohistologische Technik," is useful, but it covers much less ground and almost limits itself to a list of stains. We congratulate Dr. Macleod on his book, for it is a credit to British dermatology.

Die Neuronenlehre und ihre Anhänger: ein Beitrag zur Lösung des Problems der Beziehungen zwischen Nervenzelle, Faser, und Grau. (The Neuron Theory and its Adherents: a Contribution to the Solution of the Problem of the Relations between Nerve Cell, Fibre, and Grey Matter.) By Dr. FRANZ NISSL, a.o. Professor in Heidelberg. Jena: Gustav Fischer. 1903. Pp. 478, with two plates. Price 12*s.*

THE "neuron" theory has now held the field for over ten years as the most satisfactory hypothesis to explain and to bring into harmony all the known facts, anatomical, physiological, and pathological, regarding the structure and function of the nervous system. Although it has been almost universally accepted, there have not been wanting histologists who have brought forward from time to time certain new facts of research which, it has been contended, necessitate the rejection, or at least a modification, of the theory as first put forward and defined by Waldeyer. In this way there has grown up a small band of opponents to the neuron theory, among whom are especially to be mentioned Bethe, Apathy, and Nissl. Dr. Nissl is one of the latest recruits to the ranks and in the treatise under review he defends his position and undertakes to controvert all the arguments put forward in defence of the neuron theory by its most notable adherents. The treatise is in consequence of a highly contentious and polemic nature and the author does not spare himself or his readers in his very lengthy dissertations in order to disclose a faulty point of logic in the arguments of his opponents. Instead of choosing the most obvious method of treating the subject by laying his own views clearly and concisely before his readers he makes the champions of the neuron theory the subjects of separate chapters and his own views and opinions are left to show themselves in the course of his discussions. This does not make easy reading, but the author is of opinion that in this way he more clearly discloses the falsity of his opponents' views.

In reviewing the treatise it is not possible to give even a short *résumé* of the many points raised by Dr. Nissl, mostly of a highly technical nature, by which he seeks to overthrow the neuron theory. At the start he defines the theory in the words of Waldeyer: "The nervous system consists of numerous nerve elements anatomically and genetically independent of one another," and he will accept no modification of the theory as laid down by Waldeyer. Following this line of argument he accordingly rejects any attempt to recognise the theory of nerve units in a biological sense (Edinger) or to regard the nerve units as trophic and functional (Hoche), or as embryonic and trophic (Münzer). Dr. Nissl contends that if known anatomical or physiological facts do not harmonise with the view that the nervous system consists of so many independent nerve units or neurons, the neuron theory necessarily falls to the ground. Many of the facts which he brings forward are already sufficiently well known, such as Bethe's experiment on the crab, in which he obtained reflex phenomena after removal by section of all nerve cells involved in the reflex path. Apathy has already shown by his work on annelids that, at least for certain invertebrates, the neuron theory can no longer be maintained. Dr. Nissl admits that our ignorance of the actual connexions and relations between nerve cell, nerve fibre, and the grey matter prohibits our applying the results of Apathy's work to vertebrates, but he is disposed to believe that an analogous condition exists. He maintains that we are quite in the dark as to the constitution of the grey matter of the cortex and he believes that it contains in addition to nerve cells, neuroglia, and blood vessels, certain nerve elements the nature of which is at present unknown to us. Much of the book is taken up with histological details in regard to the structure of the nerve cell, the fibrils, and the pericellular network and their mutual relationship, about which he has much to dispute with Ramon y Cajal and others.

Dr. Nissl is one of the highest authorities on the histology of the nervous system and it will be interesting to follow the effect which his treatise may have upon those working in the same sphere.

LIBRARY TABLE.

Nerves in Disorder. By A. T. SCHOFIELD, M.D. Brux. London: Hodder and Stoughton. 1903. Pp. 202. Price 3*s.* 6*d.*—We learn from Dr. Schofield's preface that his book consists mainly of a lecture delivered some twelve years ago at

the Sanitary Institute. We are not as a rule enamoured of medical works published for lay people but to do him justice Dr. Schofield makes an apology for the issue of his book, and we think that he is justified. Even nowadays those diseases which for want of a better name we call "functional nerve disorders," though they may not improbably be based upon some minute organic changes in the nervous tissues, are frequently looked upon as "imaginary" and there is no class of disease in which sufferers are so wont to fly to the use of "cures" of various kinds or of some particular form of diet or even to such blatant forms of imposture as Christian Science. Therefore we think that when a patient sees, as he will see if he reads this book, that medical men do recognise that "nerve weakness" is a disease which can be "cured" just as easily as any other disease by means of appropriate treatment, he, or more likely she, will not waste his or her substance upon quackery and his or her remaining stock of health in the pursuit of a phantom. We cannot agree with all Dr. Schofield's statements; for instance, p. 37, "The sensation of pain can be produced as really and vividly by thoughts or ideas alone as light in the eye by striking it." Now this statement requires modification. The pain which the neurasthenic suffers is eminently real and is probably entirely produced from within. But we deny that if an ordinary healthy normal man or woman sits down and thinks of, for instance, a splinter being driven under the nail any sensation of pain will be felt. Again, we think it a pity that Dr. Schofield has given such a copious list (pp. 82 and 83) of all the symptoms which may characterise neuromimesis, for the mere perusal of the list would cause alarm to a nervous patient. But on the whole we fancy that the book may prove of use.

Burdett's Hospitals and Charities, 1903. By Sir HENRY BURDETT, K.C.B. London: The Scientific Press, Limited. Pp. 1020. Price 5*s.*—A very large amount of information is contained in this compact volume. About 450 pages are occupied with lists of the hospitals, asylums, dispensaries, convalescent homes, and nursing institutions of the British Islands and about 100 pages with a similar enumeration of Colonial and Indian hospitals; 14 hospitals are mentioned as situated in our newly acquired South African possessions—the Transvaal and Orange River Colonies. The introductory part of more than 200 pages is divided into 13 chapters treating, among other subjects, of such questions as the general outlook for British hospitals, the administration of a large hospital, hospital construction, nursing, Hospital Sunday Fund, Hospital Saturday Fund, and hospital finance. As a book of reference Sir Henry Burdett's compilation is one of the most useful of its class.

Physics and Chemistry adapted to the Requirements of the First Examination of the Conjoint Board of the Royal Colleges of Physicians and Surgeons and also for General Use. By HERBERT E. CORBIN, B.Sc., L.R.C.P. Lond., M.R.C.S. Eng., and ARCHIBALD M. STEWART, B.Sc. Lond. Second edition. London: J. and A. Churchill. 1903. Pp. 438. Price 6*s.* 6*d.*—The first edition of this book was published in 1899 and was reviewed in THE LANCET of Nov. 4th of that year, p. 1239; the authors state in the preface of the present edition that a few alterations have been made and that a little additional matter has been inserted. It appears that about 14 extra pages of letterpress have been supplied, but, strange to say, no attempt has been made to bring the book up to the standard of the present requirements of the English Conjoint Board. The syllabus now in force for the chemistry and physics section of the first examination of the board expects the candidate to possess a certain amount of knowledge of Light, whilst special reference is there made to secondary batteries. Both of these subjects have escaped attention at the hands of the authors of this text-book. These omissions are the more curious, as the preface distinctly states that "the syllabus of work in physics, in inorganic chemistry, and in organic chemistry issued by the Royal Colleges of Physicians and Surgeons has been fully treated." We notice also that the unfortunate description of starch given in the first edition, where it is distinctly implied that the granules from different plants all possess the same distinctive microscopic appearance, is retained unaltered. The Ruhmkorff induction coil has been treated in a fuller manner than was the case in the previous edition and as a rule the diagrams are good and the information given is clear and concise. We cannot but feel, however, that the value of the book to a student reading for the English Conjoint Board examination would have been greatly enhanced if the syllabus had been more thoroughly dealt with.

Alpine Flora for Tourists and Amateur Botanists. By Dr. JULIUS HOFFMANN. Translated by E. S. BARTON (Mrs. A. Gepp). London: Longmans, Green, and Co. 1903. Pp. 112. Price 7*s.* 6*d.* net.—This translation into English should prove a useful companion to tourists who know but little botany but who wish to be able to identify the various plants which they may come across in the High Alps, whilst the amateur botanist at home may obtain some idea of the richly tinted flora of the Alps by the aid of the 40 plates which the book contains. These plates are reproduced in colours from original water-colour drawings of Alpine flora by Hermann Friese, the number of individual plants figured being 250. With a view of limiting the size of the book only the more important plants of the High Alps are mentioned in the text. Each plant is clearly described and there is a short glossary at the end of the book explaining such botanical terms as it has been found necessary to use for the sake of accurate description. As an aid to the traveller in eliciting information from the country people of the Alpine districts the names of many of the plants mentioned are given in German. The arrangement of the botanical families is based upon the system of De Candolle.

JOURNALS AND MAGAZINES.

The Quarterly Journal of Microscopical Science. Edited by E. RAY LANKESTER, F.R.S., ADAM SEDGWICK, F.R.S., W. F. R. WELDON, F.R.S., and SYDNEY J. HICKSON, F.R.S. New Series, No. 185. Vol. XLVII., Part I. May, 1903. London: J. and A. Churchill. Price 10*s.*—The contents of this number are:—1. A long article by H. J. Hansen of Copenhagen on the Genera and Species of the Order Symphyla. The order includes Scutigerella and Scolopendrella. The author of the article has examined many specimens from Algeria, Cape Colony, Venezuela, Chili, the Brazils, Java, Sumatra, and Japan, and describes 24 species. He is convinced that about 100 species are still undiscovered. Collectors should preserve their specimens in spirit of about 63 per cent. alcoholic strength and at most not exceeding 70 per cent. and the specimens should not be pressed upon so as to become flattened. The article is illustrated by seven plates. 2. On the Body Cavities and Nephridia of the Actinotrocha Larva, by Edwin S. Goodrich, M.A., with two plates. 3. Enteropneusta from Madras, by K. Rammuni Menon, assistant professor, Presidency College, Madras, with a plate. The enteropneusta described by the author were dredged at depths of from six to nine fathoms in mixed sand and mud off the Madras coast and belonged to three species. 4. On the Planktonetta Atlantica Borgert, by G. Herbert Fowler, F.Z.S. This animal is a Phæodarian Radiolarian possessing in addition to the ordinary shell of the Medusetlidæ a hollow skeletal sphere larger than the shell, here termed a float. The mouth of the shell carries eight spined arms and gives origin inwards to a skeletal meshwork across the aperture which serves to connect float and shell and to support the phœnodial complex. A bundle of fine tubes

leads from the intracapsular to the extracapsular protoplasm, perforating the capsule and the diaphragm. The float, the diaphragm, and the single bundle of tubes of communication are unparalleled among radiolaria. Two plates accompany the article.

The Field Naturalists' Quarterly. No. VI., vol. II.—Edited by GERALD LEIGHTON, M.D. Edin. London and Edinburgh: William Blackwood and Sons. Price 2*s.* 6*d.*—Each succeeding issue of this interesting quarterly seems to show some improvement upon that of its predecessor. In the present number, which is well illustrated, Mr. E. Kay Robinson, in an article on Birds, solicits help in the compilation of a dictionary of the language of birds, while Mr. F. G. Aflalo writes upon "The Spring Awakening of the Sea." In "Reptile Studies" the editor discusses the question of immunity, the much debated question as to whether the mongoose is immune or not to snake-bite receiving special attention. Mr. E. M. Wood deals with the subject of Symbiosis. Among the contents will also be found papers on the White Cattle of Chartley, Staffordshire; Newts in Spring; the Nests and Eggs of Birds; the Great Black Woodpecker; Rambles in the Lincolnshire Wold; and a Naturalist's Rambles in Southern China. The frontispiece is reproduced from a photograph showing four young robins on a bough, but the picture in the copy before us has been spoilt by being pasted to the opposite page. This fault we have noticed before and it is a pity that such an excellent publication should be marred by careless binding.

Dublin Journal of Medical Science.—The original communications in the May number are on the Operative Treatment of Enlarged Prostate, by Sir William Thomson; on the Diagnosis of Perforated Gastric Ulcer, by Mr. R. C B. Maunsell; and on Immunity, by Dr. R. J. Rowlette. The Clinical Report of the Gynæcological Department of the Rotunda Hospital, by Dr. R. D. Purefoy, for the year ending Nov. 1st, 1902, also appears in this issue.

HOSPITAL MAGAZINES.

Charing Cross Hospital Gazette for May.—Under the heading of American Quacks we are glad to see that two popular magazines are called to account for publishing in their advertisement columns the mendacious effusions of quacks. Mr. P. L. Daniel commences a paper on the Conservative Treatment of Tuberculosis of Bone and Joints and of Superficial Abscesses.

St. George's Hospital Gazette for May opens with an article on Compound Fractures by Mr. L. Jones in which he states that the results of the treatment of compound fractures at St. George's Hospital during the past three years show a marked improvement. Out of 66 cases admitted only two died (excluding those patients who died from shock within 12 hours of admission). "This percentage of 3 stands out markedly against those of 40, 41·8, and even 79 which were given by various authors in the pre-antiseptic days." In a foot-note to the word stinkle, which occurs in "Kubla Khan," a parody said to have been inspired by a nightmare consequent upon reading about a proposal to remove St. George's Hospital, the ways of the motor car are aptly described. It is as follows:

> Cf. nursery rhyme (new style).
>
> Stinkle, stinkle little car!
> How I wonder whose you are!
> Chucking up the mud and dust
> Like a geyser on the bust.

Guy's Hospital Gazette of May 23rd contains a clinical lecture on the Operative Treatment of Gastric Carcinoma by Mr. Charters Symonds and publishes an essay on the Pathology of Chorea to which was awarded the treasurer's prize by the Physical Society of the hospital.

St. Mary's Hospital Gazette for May.—In addition to a paper on Aphasia by Dr. Robert Maguire there is a short but interesting article on Medicine in China by Dr. Arthur Stanley, health officer of Shanghai. "The Chinese Pharmacopœia," says the author, "is the largest in the world." Our national summer game does not seem to be very popular among the students at St. Mary's Hospital, for in the editorial notes of the gazette attention is called to the fact that exactly six men have signified their intention of playing cricket this year.

St. Thomas's Hospital Gazette for May has for its prominent feature "Some Extracts from the Common-Place Book of William Savory, Surgeon and Student of the Borough Hospitals in 1788 89." The picture of the life of this obscure country practitioner in the eighteenth century as depicted by the extracts from his diary and common-place book makes very interesting reading.

Looking Back.

FROM

THE LANCET, *SATURDAY*, JUNE 4, 1825.

FOREIGN DEPARTMENT.

ANALYSIS OF FOREIGN MEDICAL JOURNALS.

REVUE MEDICALE—MARS.

The Olfactory Nerve.

M. MAGENDIE has lately reported to the Academy a pathological fact, in confirmation of his former opinion, that the *olfactory nerve* is *not* the *organ of smell.* BECLARD had a man under his care in the Hôpital la Pitié, in whom on dissection the anterior portion of the brain and olfactory nerves were found almost destroyed by ulceration, but who at the same time retained his sense of smell. He took snuff, and was quite capable of distinguishing its various qualities.

Appearance of a Medical Work in Turkey!

A medical work has made its appearance, the only one during 150 years, at Constantinople, it is a folio, of 300 pages, with 56 copper-plate engravings, on anatomy and medicine, entitled, "*Mirat el abd fi tecbrih azail,*" by Chani-Zadeh Mehemmed-Ata-Oullah, member of the religious and judicial order of the *Oulema.* The Oulemites fill the offices of ministers of religion, of the laws, of equity, and have always endeavoured to crush the rising genius of the nation. It is not, therefore, a little surprising that a work on anatomy, physiology, medicine, and therapeutics, should be published by one of this fraternity. The substance of the work appears to be a translation from various French works. The author being a Mussulman, what he says on vaccination is very interesting; he gives its history, and insists on the many advantages it has over inoculation; he concludes by giving directions as to its use, and with some of the vaccine virus brought from the village of Aiaz-aga, many thousands have been vaccinated in Turkey.

ST. BARTHOLOMEW'S HOSPITAL.

May 23.—Robert Accam, æt. 74, hale constitution, was admitted into Baldwin's ward, with a rupture of the cornea and protrusion of the iris on the right side, in consequence of a blow from a cricket ball; his pulse was 80, full and strong; headache. Cold cloths were applied, and some purgative medicine given (no local depletion!).

28.—Pulse 85; more natural; tongue covered with a slice of Abernethy's 'leather breeches';* pain in the head subsided; slept well; the eyelids and face tumid and of a livid colour; bowels open.

* This is a common expression of Mr. ABERNETHY'S, to denote a furred state of the tongue.

THE LANCET.

LONDON: SATURDAY, JUNE 6, 1903.

"Opticians" and Spectacle Prescribing.

WE publish to-day two letters, from representative "opticians," demurring more or less to the statements put forth in our leading article in THE LANCET of May 9th, p. 1312, with regard to spectacle prescribing. Mr. AITCHISON is fearful that some of those statements are "liable to misinterpretation," and he tells us that YOUNG did not discover either astigmatism or the function of accommodation. It is universally admitted among men of science that the credit of discovery is not due to the person who first hints at a thing, but to him who establishes the truth with regard to it, and this is the precise position of YOUNG with regard to accommodation, although no claim of the discovery of the mere fact of the occurrence of some change has ever been made on his behalf. "It is now nearly 60 years," wrote DONDERS in 1864,[1] "since THOMAS YOUNG satisfied himself that the power of accommodation depends upon a change of form in the lens. Nor was he led to this conviction merely by the exclusion of other hypotheses; he adduced reasons which, properly understood, should be taken as positive proofs. As an hypothesis the idea had already existed, but previously to the time of YOUNG it could be considered as little more than a loose assertion, to which no value was to be attached." YOUNG'S claim to be the discoverer of astigmatism has, we believe, never before been questioned and Mr. AITCHISON certainly does not succeed in questioning it successfully. The version given by DONDERS[2] is that in relaxation of his eye YOUNG saw in his optometer, held in a horizontal position, the double images of the thread intersect one another at seven inches from the eye, but only at ten inches when in a vertical position. The optician CARY, to whom YOUNG *communicated his discovery*, stated to him that he had before *often* found that near-sighted people distinguished objects more acutely when the glasses suited to them were held in a particular oblique direction before the eye—a manœuvre by which, at least when strong glasses are necessary, a certain degree of astigmatism may be corrected. On this basis Mr. AITCHISON says that "CARY knew as much about astigmatism as YOUNG did, particularly when the latter goes on to say, 'The difference is *not in the cornea*, for it exists when the effects of the cornea are removed by immersing the eyes in water.'" What really happened was this, that CARY had observed one of the *effects* of astigmatism in the cases of certain customers, but had not been led by his observation to form even a surmise as to the nature of the condition to which the effect was due. His observation remained wholly barren—so barren, indeed, that long after his time opticians were exercising their ingenuity in the construction of frames capable of holding glasses in oblique positions before the eyes. Mr. AITCHISON himself, although an optician, seems to believe that YOUNG was in error in saying that his own astigmatism was not corneal. Mr. AITCHISON does not appear to know that the lens of the eye is often astigmatic, and that YOUNG'S experiment conclusively proves it to have been so in his case. It is further remarkable that YOUNG seems to have been in no way incommoded by his defect, insomuch that he regarded the malformation of his lens only as a matter of philosophical interest, and had no inducement to design glasses for its relief. When Sir GEORGE AIRY discovered a similar defect in himself, he, not as an optician but as a mathematician, calculated the curves required for its correction, and ordered lenses which were made for him by the optician CHAMBLANT of Paris. It did not become customary for ophthalmic surgeons to prescribe such glasses until DONDERS in 1862 by the publication of his treatise, "Astigmatismus und Cylindrische Glaeser," had called general attention to the subject and had arranged with the opticians, NACHET of Paris, and PAETZ and FLOHR of Berlin, to supply the lenses to all who might require them. The discovery was made by YOUNG in 1793 and remained unfruitful in spite of CARY and other opticians. It was made again by AIRY and again remained unfruitful except in his own case, and it was not until DONDERS undertook the general investigation of refractive errors that astigmatism became understood and the means of relieving it universally accessible. We think the contentions of Mr. AITCHISON may be dismissed from further consideration.

Mr. LAURANCE joins issue with us mainly on a question of words. He says, "All discoveries in optics have been made by opticians, whether medical men also or not is beside the question." Few things are more useful than definitions and we may therefore say that we used the word "optician" as a term of courtesy to indicate a person who was engaged in the sale, or sometimes also in the manufacture, of optical instruments and not to indicate one who was conversant with the physics of light. The latter sense is, no doubt, the more correct, but the former has somewhat usurped its place in common parlance. We challenge Mr. LAURANCE to name a single discovery relating to the structure, optics, refraction, or employment of the eye which has been made by an "optician" who was not "also a medical man." We further differ by the whole sky from his opinion that any information likely to be obtained by spectacle-sellers in the course of their trade education can ever render them qualified to prescribe spectacles for any defects of vision in which the sufferers might not safely be trusted to choose for themselves. The eye is a living organ as well as an optical instrument. As a living organ it is subject to malformations and diseases of numerous kinds, and its diseases and malformations constantly complicate and are complicated by its optical defects. It is impossible for anyone to deal adequately with the latter who is not able to deal also with the former. The first aim of an ophthalmic surgeon, when he is consulted about a case of defective sight, is to ascertain whether the eye itself be

[1] Accommodation and Refraction of the Eye, p. 10.
[2] Ibid., p. 456.

healthy or the subject of disease; and the next is to ascertain whether there be any bodily or constitutional ailment by which it is prejudicially affected. Having thus applied his medical knowledge, and having, by methods of exclusion, come to regard the defect as purely optical, he can then bring his optical knowledge into play and can prescribe spectacles for the relief of a defect which he is not called upon to cure. The so-called "optician" would have to begin at the wrong end, and would be likely, as human nature is constituted, sometimes to place undue reliance alike upon his fancied knowledge and upon the resources of his trade. Mr. AITCHISON makes mention, in more than one passage of his letter, of erroneous views about spectacles which have been entertained, and even published, by medical men who had no special knowledge of the subject. The errors quoted are of old date, and they would dwindle into insignificance before those which would certainly attend upon any systematic attempt on the part of spectacle-sellers to become practitioners in ophthalmology. It is with this attempt that the public are at present threatened. In every locality shops are springing up the proprietors of which hold themselves out, by placards, by affixes, and by advertisements, as being qualified to give advice about the eyes and sight; and we have no alternative but to denounce the whole system as one which rests upon false pretences, and which cannot fail to be followed by disastrous consequences. The new professors, we see, are being directed by the "British Optical Association" to style themselves "optologists," a name which at first sight rather suggests professors of the science of roasting or baking (ὀπτός), but which will none the less be effective in deceiving the public. The association kindly adds that the term "oculist" is nowadays understood to mean a "surgeon who operates." In the medical profession it is usually understood to mean a quack who sails under false colours by using a word which does not assert the possession of a medical qualification; and it is on this ground that qualified ophthalmologists are careful to describe themselves as "ophthalmic surgeons." The ignorance of the public has preserved "oculist," and we shall not be surprised if before long it leads them to describe even medical men as "optologists."

Public-house Trusts.

ANY movement which includes among its aims the reduction of the amount of drunkenness within the British Isles has strong claims upon the attention of the medical men of this country. In some form or other the physical and the intellectual evils wrought by the excessive use of alcoholic beverages are continually obtruding themselves upon our notice. Whether we are engaged mostly with hospital practice or with practice among the poorer classes or with practice limited to the ranks of the well-to-do we are unfortunately in each case to an almost equal extent confronted with the vicious influences of alcoholic excess. The aims and methods of the Central Public House Trust Association are doubtless in their broad lines familiar to our readers. The recent issue, however, of the association's second annual report may serve well to bring us to weigh the results hitherto achieved by the association and to consider how far the trust movement merits our support as an effort to lessen the excessive amount of drunkenness in our country. We are aware that persons who belong to what may be termed the extreme temperance party view the trust idea with scant favour. We need not in the present article set about refuting the arguments of the temperance extremist but will content ourselves with commenting upon the matter from the point of view of the average unprejudiced moderate-minded individual. To such a person the trust movement appeals because although it cannot hold out the offer of general national moderation in the use of alcoholic drinks, yet it does offer a readily available practical means of improving the conditions under which such drink is at present sold, and of gradually improving the attitude of the public mind towards the drink question generally.

The Central Public House Trust Association has two main objects. The first of these is practical and is, in short, to acquire public control of the traffic in intoxicating liquors by substituting everywhere for private licensees a public body in the shape of a public-house trust company. The second object is educational, or rather propagandist, and aims at influencing the mind of the general public by means of the public press, by pamphlets, by lectures, and through parliamentary representatives. Considering the short life of the trust movement in this country it must be confessed that the second object, at any rate, bids fair to be well achieved. For few people who read their newspaper can have escaped a general acquaintanceship with the broad principles and aims of the trust movement. Regarding the practical aim of the association we may spend a moment profitably in reviewing the present position of the association as revealed by its second annual report. This contains information relating to 37 trust companies and societies for various counties and localities. It is the object of the trust movement to have a company for every county in England and Wales. There remain at the present time 21 counties without any such company. For the institution of these companies the funds of the trust association are, of course, required, if only to pay for licences granted to the association, and in the past year the demands made upon the association's means have proved greater than the incoming money. Considerable expense is naturally involved in carrying out the propagandist work of any association aiming at a wide influence upon public opinion, and the sum expended on such purposes, under £2000, does not appear excessive when compared with the results achieved. The report suggests that practical progress has been slower than that made in the educational efforts of the association. This is not surprising when it is remembered that practical progress in the objects of the trust infers acquisition of public-house licences. The trust does not desire, of course, to acquire fresh licences unless where a fresh licence is to be granted in any circumstance, in which case the trust naturally desires to acquire the licence rather than to let it fall into private hands. The trust aims at diminishing the number of licences. But the buying up of old licences is a matter that involves considerable time and investigation. In the case of new licences as long a period as 18 months

is necessary before the new house can be opened. In the case of the acquisition of existing licences there is greater difficulty in England than there is in Scotland owing to the stronger hold in this country possessed by the system through which public-houses are "tied" to one or other firm of brewers or distillers. The opportunities of acquiring important houses are few, nearly all the best houses being in the hands of the brewers. There are, however, at the present time 70 houses in town and country under trust management and more than twice as many pledged to come into trust hands when existing tenancies expire. For the acquisition of existing licences the association looks largely to land-owners, whether public bodies or private individuals. If land-owners can be impressed with the advantage accruing to those who dwell upon their land by the presence amongst them of well- rather than ill-managed public-houses, then the association may get the support that it looks for.

As the matter stands at present we think that the evidence, both from the report out of which we have made brief extracts and from other sources, points to distinct advantage ensuing from a prevalence of the trust system. We are acquainted with the unfavourable criticism of the results of the Gothenburg system in Sweden and Norway which Mr. MALINS put forward in his evidence before the Royal Commission on the Liquor Licensing Laws. We are not convinced, however, that a similar system in Great Britain need produce similar results. We doubt whether the amount of corruption that crept into the Scandinavian system would prevail in this country. Moreover, the inducements held out to municipalities to make great profits out of their public-houses and to justify themselves by the admirable objects to which such profits were devoted do not prevail under the system advocated by the Central Public House Trust Association to the same extent as they do under the Gothenburg arrangement. All reform in the direction of temperance is beset with the difficulties that hedge any attempt to control a strong though undesirable carnal inclination. Reform to an ideal degree, to the degree of making all men and women in England habitually sober, is not to be achieved at a blow. The Central Public House Trust Association is doing work which should improve the present state of the liquor traffic in this country and should help toward the realisation of that general national sobriety which to-day is unfortunately little more than the dream of the ardent temperance reformer.

Leprosy.

THE importance of a knowledge of the etiology of leprosy can hardly be over-rated. In this country it is true that the disease, though once very prevalent, is now very rarely to be met with and when seen it usually occurs in persons who have contracted it in other parts of the world. In some countries, however, as in Iceland, Norway, India, and China, it is very frequently encountered; and, unhappily, it has appeared in new countries where it had never been known before. In the Hawaiian Islands and Australia it has been found and has occurred to a large extent, appearing synchronously with the advent of immigrants coming from countries where the disease already existed. The problem, therefore, of the etiology of so widespread a disease is surely of the highest importance but although many investigators have examined the question with care the results have not been very satisfactory. There is little doubt that the bacillus lepræ, a micro-organism found in leprous lesions, is the true *causa causans* of the disease; and, indeed, this is now generally admitted, but it must not be forgotten that it has not been possible hitherto satisfactorily to cultivate this bacillus in artificial media and therefore three out of four of KOCH'S postulates cannot be fulfilled. Nevertheless, it may certainly be allowed that the bacillus lepræ is the essential cause of the disease. Even when this admission has been made it cannot be said that the problem of the etiology of the disease has been solved, for it is of as great or even greater importance for us to learn how this bacillus finds entrance into the bodies of those whom it affects. It is now held by very few that the disease is hereditary, for it is certain that healthy children can be born of leprous parents. The theory that the disease is contagious has many supporters; it is true that anyone who dwells in a community of lepers is liable ultimately to contract the disease, but 10, 20, or even 30 years may elapse before it appears and therefore we are almost compelled to believe that the malady does not only spread by mere contagion.

It must be confessed that at the present time we have no exact knowledge of the mode of entrance of the bacillus into the body. Mr. JONATHAN HUTCHINSON has for many years been the chief upholder of the theory that the disease is associated with the ingestion of putrid fish This theory was first brought forward by him in 1870 and has been supported by its author by a very large amount of evidence, but it has received a very lukewarm welcome from most of those interested in the subject. Still, Mr. HUTCHINSON has done so much for pathology, especially in its clinical aspects, that any theory put forward by him deserves the most careful attention and examination before it is rejected, however much it may be opposed to our preconceived ideas. On the other hand, of course it is unwise to follow blindly a teacher, however eminent, for the history of science shows many instances where distinguished teachers have led their followers out of the right road. In order to obtain further evidence Mr. HUTCHINSON has made journeys to South Africa and to India and he has now on his return from the latter country delivered at the Medical Graduates' College and Polyclinic an address in which he maintained the views which he has advocated so long.[1] At the outset it must be pointed out that Mr. HUTCHINSON'S fish theory does not require the denial of the bacterial origin of the disease, it merely attempts to indicate the precise vehicle by means of which the *materies morbi* enters the body. Mr. HUTCHINSON'S theory was originally founded on a case of leprosy occurring in a sea captain who for nearly 30 years had traded with Barbados; during his stay there, which usually lasted about six weeks, he always lived on his ship and none of the ordinary causes seemed likely to have brought about the disease. Mr. HUTCHINSON was thus led to think that some article of diet might be the cause and further consideration led him to consider that it was probably some form of fish. Further observation has merely

[1] THE LANCET, May 23rd, 1903, p. 1464.

resulted in confirming this opinion and his visits to South Africa and India were undertaken for the purpose of investigating statements apparently contradictory to this hypothesis.

In one particular Mr. HUTCHINSON has modified his theory. He acknowledges that the disease may be transmitted by "commensalism"—that is to say, leprosy may be communicated by any food when the food has become infected by the leper's hands. At Lahore Mr. HUTCHINSON saw a baker among the out-patients at the hospital whose hands had leprous ulcers on them. In this way infection could doubtlessly take place and children are especially ready to receive food from others, even from infected hands. The three main objections to the fish theory have been that in the first place many persons habitually partake of fish but do not contract leprosy; in the second place, that leprosy occurs in districts where fish is unknown; and, thirdly, that by their religion certain sects are forbidden to eat fish and yet many of their members become leprous. These objections Mr. HUTCHINSON sets himself to answer. The first difficulty he surmounts by saying that it is not all fish that will, in his opinion, cause leprosy but only badly cured fish; it is not the excessive use of fish but the accidental reception of a specific ingredient which brings about the disease. The second objection is at first sight of more importance. Writer after writer has roundly asserted that leprosy is found, and that extensively, in districts where fish does not exist—where, in fact, it is impossible to obtain fish. There were two districts in India in which Mr. HUTCHINSON was informed that no fish was eaten, for no fish existed. These were the Chota Nagpur district and the sub-Himalayan country. Mr. HUTCHINSON was assured by men who had lived in the neighbourhood that in the Chota Nagpur district leprosy was prevalent but no fish was obtainable, yet when he visited this district he found that fish was an article of diet in the leper asylum itself and that many of the patients considered that their leprosy was caused by eating fish. In the markets fish was exposed for sale. In those parts of the sub-Himalayan district which were visited by Mr. HUTCHINSON fish was plentiful. Thus Mr. HUTCHINSON claims that one great objection to the theory falls to the ground. The religious difficulty at first sight seemed to be more formidable, but although Hindus will acknowledge that it would be better from a religious point of view for them to abstain from fish, yet the majority eat fish readily and, in fact, Mr. HUTCHINSON was able to find only one man affected with leprosy who absolutely denied ever having tasted fish and he asserted somewhat naïvely that his reason for not eating fish was that he did not like the taste of it. There is, however, a very strict religious sect in India, the Jains; they are few in number but they are utterly averse to taking life in any form and therefore it may be accepted that it is extremely unlikely that any Jain would ever eat fish, and Mr. HUTCHINSON was unable to find anyone who knew of a Jain affected with leprosy. In an island named Salsette, near Bombay, leprosy is increasing and it is interesting to note that most of the inhabitants of this island are Roman Catholics and therefore they are in the habit of eating fish very regularly. The objection formed on religious injunctions against fish-eating has been weakened by these investigations of Mr. HUTCHINSON and mere general statements that the religious tenets of a sect forbid the eating of fish cannot be allowed to outweigh the direct evidence that fish is eaten.

There is another point that needs to be considered. In India and many other parts of the world various diseases are confused with leprosy, and chief amongst these, as Mr. HUTCHINSON has shown, is leucoderma; therefore the statement that a person is leprous must not be taken as necessarily true unless we can be certain that the observer was aware of this confusion and competent to diagnose the disease. Syphilis and psoriasis are also frequently confused with leprosy.

A careful examination of Mr. HUTCHINSON'S evidence will convince most people that there is something to be said in favour of his theory. It cannot, however, be held to be proved until the bacillus lepræ has been shown to be present in fish, and stress was laid on this point by Dr. H. RADCLIFFE CROCKER at the adjourned discussion on Mr. HUTCHINSON'S paper. It is not at all improbable that an intermediary host may be necessary, as is the case with many of the intestinal parasites. Nevertheless, though at present the theory is only a theory, it is well worth while for general hygienic reasons to attempt to improve the preservation of the fish eaten in countries where leprosy is prevalent such as India and the chief method to this end is the reduction of the salt duty which militates greatly against its thorough use in the preservation of fish. Whether we accept Mr. HUTCHINSON'S theory or not we must express our admiration of his energy in undertaking journeys of many thousands of miles for the purpose of advancing our knowledge of disease and its cause.

Annotations.

"Ne quid nimis."

THE ROYAL MEDICAL BENEVOLENT COLLEGE.

WE would remind our readers that the twenty-ninth festival dinner of the Royal Medical Benevolent College will be held at the Hotel Cecil on Wednesday, June 10th, at 7 P.M. H.R.H. the Prince of Wales has graciously consented to take the chair and it is to be hoped that he will be supported on this occasion by an influential number of the friends and supporters of the charity in question. We need not plead in many words for support for Epsom College. The members of the medical profession know perfectly well the benefits which this society can give to themselves, their widows, and children. Moreover, the College supplies an admirable education which is open to the children of any man, whether he be medical or not. We will simply add that in England alone there are over 20,000 medical men and that if only each one of these would subscribe 10*s.* per annum to the Royal Medical Benevolent College its present anxieties would be largely lightened and its power for doing good would be very greatly increased.

MIDWIVES AND STILLBORN CHILDREN.

IN THE LANCET of April 25th (at page 1200) and of May 9th (p. 1338) the subject of certificates of stillbirth given by midwives in Manchester was mentioned in connexion with a case investigated by Mr. L. J. Aitken, the then acting coroner. It was shown that at the

lowest computation 500 infants must be buried in the Manchester cemeteries as stillborn every year, while Mr. Aitken's calculations put the number as high as 1500, and that, as he said, "we have not a single guarantee that every one of these has not lived." Jessie Donough, aged 32 years, the midwife whose proceedings had been in question, was placed in the dock before the Recorder of Manchester on May 25th and pleaded guilty to making a false statement that a child who was born alive had been stillborn. The child had lived one and a half days. "The Recorder said he hoped the sentence he passed would be a lesson to others and ordered the prisoner to go to prison with hard labour for 12 months." Much credit is due to Mr. Aitken for his investigation into this matter, for the proceedings of unscrupulous midwives may largely influence the rate of infant mortality.

TOILET AMMONIA.

COMPARATIVELY strong solutions of ammonia are commonly sold now for domestic purposes, it may be for the bath or for removing grease stains. We have nothing to say against their employment for either object and certainly the use of a few drops of ammonia in the bath is harmless while it is both invigorating and cleansing. It must be remembered, however, that ammonia gas is after all a poison, strong ammonia vapour being fatal to both animal and vegetable life. In most cases the examples of poisoning by ammonia vapour that appear in toxicological records have been the result of an accident. Thus the ammonia bottle has been injudiciously applied to the nostrils of persons in the throes of an epileptic fit and death has resulted. There is also an instance on record of poisonous effects resulting from the breaking of a bottle of ammonia and the sudden evolution of the powerful gas from the spilt liquid. In the bath-room such an accident might easily happen and the public should be enjoined to use the liquid with great care. A spilt bottle of ammonia in the bath-room might easily cause serious shock. A warning, it seems to us, should be printed on the labels of all bottles containing ammonia for domestic purposes, that the vapour is poisonous in large quantities and that special care should therefore be exercised to prevent the wholesale escape of the contents.

THE MEDICAL PROFESSION AND ST. LUKE'S DAY.

A CORRESPONDENT writes to remind us of the fact that this year St. Luke's Day, Oct. 18th, falls on a Sunday. He refers to the fact that the annual service which is held in St. Paul's Cathedral under the auspices of the Guild of St. Luke and also the special services which have been held in Liverpool on or near the same date afford an opportunity of combined worship as a profession to the medical men of London and of Liverpool. He goes on to ask, "Is it too much to hope that the example set by London and Liverpool may be followed this year in other towns and cities?" He points out that St. Luke's Day falls in what may be called "the medical month," when medical schools and medical societies commence their winter session. Most medical practitioners also are at home, having returned from their well-earned holiday, and to many of them life is a round of wearisome duty with little to brighten it, while the efforts which they have to make to earn a livelihood are becoming more difficult every year. It is well, therefore, continues our correspondent, that every member of the medical profession should periodically be reminded of the Divine Exerciser of the healing art, of Luke the beloved physician, and of the respect in which members of the medical profession are held by the clergy. He goes on to point out that services such as these offer an opportunity to members of the medical profession who cannot afford a guinea to subscribe some smaller sum to medical missions or to the benevolent societies of the profession. We think that our correspondent's idea is a good one. The meeting together of the members of the medical profession in common worship is an additional bond of union between men who are, or should be, actuated by one idea—viz., to benefit their fellow creatures by the exercise of their skill. We do not for one instant imply that a medical men should exercise his profession purely for the love of his fellows, for in the medical profession no less than in any other the labourer is worthy of his hire, but in the large towns of this land the carrying out of the suggestion of our correspondent would, we think, work for the good both of medical men and of their patients.

THE FIRE AT ETON COLLEGE.

THE terrible disaster which has cast a gloom over that great school which was about to celebrate its yearly festival was apparently due to one of those heart-rending calamities of which no definite explanation can be given. The house in which the fire broke out was old and irregularly built but no evidence was adduced at the inquest to show in which room the fire originated, neither has the cause of the fire been ascertained. The saddest point in the story is the apparently indisputable fact that the boy Horne's life would have been saved had not the windows of his room been barred, but in Lawson's case death seems to have overtaken him in his sleep. It is, however, comforting to think that both deaths were due to suffocation and not to shock by fire. With the recommendation of the jury as to the removal of all bars from windows we most thoroughly agree. If any protection is necessary for disciplinary or other purposes it seems to us that wire-netting such as is used for rabbit-fencing would answer every purpose. Such netting could easily be cut or broken on emergencies and would be quite strong enough to prevent any boy getting out of his window, either purposely or in a state of somnambulism, which condition has always to be thought of. The window of Horne's room opened on to a balcony over a bay window and a fall from this would at any rate cause serious injury. That two young lives should have been thus prematurely cut off is sad in the extreme and we can but offer our sympathy to the parents of the dead, *quorum animabus propicietur Deus*, to Mr. Kindersley the housemaster, and to the school as a whole upon the calamity which has darkened the summer half of 1903.

THE DISTRIBUTION OF PLAGUE.

As regards Cape Colony the acting medical officer of health states that for the week ending May 9th the condition of the various places mentioned below was as follows. At the quarantine station, Saldanha Bay, 2 Asiatic males remained under treatment in the hospital, both being convalescent. At Port Elizabeth 5 cases of plague were discovered—namely, 1 European female on May 3rd, 1 native male (found dead) on the 4th, 1 European male on the 5th, 1 native male (found dead) on the 7th, and 1 European male (found dead) on the 9th. At the Plague Hospital, Port Elizabeth, 2 native males were discharged recovered, leaving 13 cases under treatment. Plague-infected rats continued to be found in the town during the week. At East London 4 cases of plague were discovered—namely, 1 native male (found dead) on May 5th, 1 native male on the 6th, 1 European male on the 7th, and 1 native male on the 9th. At the Plague Hospital 1 European male died during the week and 1 native male was discharged recovered, leaving two cases under treatment. (Note.—Owing to a telegraphic error 2

cases instead of 1 were shown in the report for the week ending May 2nd as having been admitted to hospital. The native male discovered on April 30th was the only case admitted to hospital during the week. 1 patient remained in hospital under treatment at the end of the week.) At King William's Town 3 cases of plague were discovered, namely, 1 native male (found dead) on May 3rd, 1 European female on the 7th, and 1 native male on the 9th. At the Plague Hospital 1 European female died during the week, leaving 6 cases under treatment. At Graaff-Reinet no cases of plague and no plague-infected rats were discovered. At Burghersdorp 1 plague-infected rodent was discovered. At Queenstown plague-infected rats were discovered on the railway station premises. As regards the Mauritius a telegram from the Governor received at the Colonial Office on May 29th states that for the week ending May 28th there was 1 fatal case of plague.

THE WORK OF THE IMPERIAL INSTITUTE.

FOR ten years we have waited for some evidence that the Imperial Institute would justify its existence. We have watched the fading of that "regally gorgeous" colouring which the ideal of British brotherhood, as realised at South Kensington, presented to the astonished gaze of the world at large, and we have followed with appropriate concern the unsuccessful efforts of those in authority to run the institute as a club or a tea garden. The poetry of the Imperial conception may be said to have finally disappeared when in 1900 the Government took possession and handed over to the University of London a large part of the actual buildings. In January last, through the agency of an Act passed in July, 1902, the institute was transferred to the care of the Board of Trade. With the assistance of an advisory committee, upon which are also represented India, the colonies, and the Board of Agriculture, Sir Alfred Bateman, K.C.M.G., now directs its fortunes, and, shorn of its former glories, the institute has sunk to the indignity of becoming a mere branch of the commercial, labour, and statistical department. As a result of these proceedings our patience has at last been rewarded, for there has just appeared the first "Bulletin of the Imperial Institute." Professor Wyndham R. Dunstan, F.R.S., the director, was at one time at the head of the research laboratories of the Pharmaceutical Society of Great Britain and we are therefore not surprised to find that although commercial matters receive chief attention in the bulletin there is yet much of medical interest. Several drugs and allied materials have been subjected to examination by the scientific workers whom Professor Dunstan controls, with, it is claimed, results of permanent value. Thus *Podophyllum Emodi*, a plant common in Northern India, has been shown to be chemically very similar to the familiar *Podophyllum peltatum*. The therapeutical effects of the drug were studied by members of the St. Thomas's Hospital staff and they concluded that it constituted an efficient substitute for the latter species. It may be noticed in passing that these opinions are somewhat in conflict with the views of earlier investigators. An examination was also made of an Egyptian plant—*Hyoscyamus muticus*—and this also is said to have been proved to be of service, though in exactly what capacity is not clear. The chemical composition of certain oil-yielding nuts from Brazil, Portuguese East Africa, and British Honduras has been ascertained, while some useful information seems to have been gleaned as to the poisonous effects on horses and cattle of some Indian and Colonial fodder plants. There is also another field in which an attempt has been made to further medical progress. Office room has been provided for the Colonial Nursing Association—a body which selects trained hospital and private nurses for the Crown colonies and other British dependencies. There are, therefore, not wanting signs of vitality on the part of what is left of the institute and possibly in the future the scope of its operations may become as great as was hoped for when first the idea of its establishment took shape.

THE CENTRAL MIDWIVES BOARD.

Dr. J. Ward Cousins has kindly forwarded to us a copy of the minority report, signed by himself, by Dr. W. J. Sinclair, and by Mr. E. Parker Young, respecting the draft rules framed by the Central Midwives Board. As, however, the draft rules in question have not as yet obtained the approval of the Privy Council, as required by the Midwives Act, they are so far not available for comment and we consider that without them it is impossible to discuss the modifications proposed by the signatories of the minority report. When the rules have obtained the approval of the Privy Council we shall deal with the whole matter.

THE ANTI-SYPHILITIC TREATMENT OF TABES DORSALIS AND GENERAL PARALYSIS.

IN a contribution published in the *Philadelphia Medical Journal* of April 18th, dealing with the most recent developments in the treatment of tabes dorsalis and general paralysis of the insane—two diseases hitherto regarded as hopelessly incurable—Professor Leredde of Paris brings together a number of important facts and illustrative cases and indicates briefly the direction in which further development may be expected in this branch of therapeutics. Professor Renaut of Lyons had recently shown that the pathological changes in tabes dorsalis and general paralysis may be syphilitic without necessarily conforming to the old classical description of syphilitic lesions. Nageotte's recent observations have shown that tabes is a chronic inflammatory affection of the spinal meninges affecting with peculiar intensity the posterior spinal nerve roots. The appearance of the lesion is quite consistent with the syphilitic origin of tabes and the cerebro-spinal fluid shows a moderate or marked degree of leucocytosis. By "recovery" in tabes dorsalis Professor Leredde means the arrest of the destructive process, comparable to the arrest of pulmonary tuberculosis. Fournier, in a recent work on para-syphilitic affections (1899), quotes a case of tabes with arrest of symptoms for 16 years after having undergone anti-syphilitic treatment. Recent observations by Lemoine of Lille on the "intensive" mercurial treatment of general paralysis and of tabes dorsalis, an account of which appeared in an annotation in THE LANCET of Sept. 6th, 1902, p. 690, and additional observations made subsequently by Leduc, comprise ten cases of tabes dorsalis subjected to the "intensive" mercurial treatment, with the result that considerable sensory and motor improvement took place in all and some few were cured. As regards general paralysis Professor Leredde, after collating a number of cases, carefully observed and recorded by various authors—viz., six cases by Lemoine, nine by Devay of Lyons, and three by Cassàet, and adding to these other cases under his personal observation, making a total of 26 cases—says that these 26 cases may be considered as showing that good prospects of recovery may be entertained for general paralysis—a disease hitherto universally regarded as hopelessly incurable and fatal. The following two typical cases may be cited as illustrative of the results of treatment for general paralysis. Case 1 was that of a male general paralytic with weakness of the lower limbs, vertigo and ataxia, disturbance of speech and of handwriting, loss of memory, and a grandiose mood. He was treated with three-fourths of a grain of calomel injected weekly into the subcutaneous tissue. After some months his speech and handwriting improved, his memory returned rapidly, and the mental state regained its normal character. At the date

of publication of this case (by Dr. Devay in 1902) complete recovery had been maintained for some time. Case 2 was that of a male general paralytic with tremors of the lips and hands, irregularity of the pupils, dulness of memory, dementia with confusion of mind, and loss of control over the sphincters. Mercurial inunction was tried and found to be followed by improvement which was rapid at first and slower afterwards. Gradually the mental state returned to the normal level and the patient was able to return to his business. During the next five years further improvement was noted, recovery being considered as complete at the end of that period by Dr. Cassiet, under whose care the patient had been during all that time. Professor Leredde draws the following important and weighty conclusions. First, anti-syphilitic treatment in patients with tabes dorsalis or general paralysis should begin early. "Delay is dangerous, because while we wait irremedial degenerations of the nervous system may be occurring." Secondly, for vigorous adults from one-half to three quarters of a grain of mercuric benzoate in normal salt solution should be given hypodermically as the full dose, the first few injections being half a grain, slowly rising to three-quarters of a grain. Symptoms of intolerance, such as indigestion, loss of flesh, and febrile reaction, would indicate over-dosage, in which case the dose should be lowered. Thirdly, the daily dosage should be increased only very slowly and the mouth and gums should be kept clean. In this way, adds Professor Leredde, dangers are minimised and therapeutic accidents are avoided.

THUNDERSTORMS AND TELEPHONES.

IT is well known, of course, that electrical disturbances in the air interrupt the telephonic and telegraphic services and it has been stated that powerful discharges have occurred at the terminals of public electrical apparatus during the passage of lightning overhead. A violent thunderstorm passed over the metropolis last Saturday and it is stated that during the whole time this electrical storm was in progress very alarming electric discharges took place over the two large telephone switch boards at the Southwark headquarters of the Metropolitan Fire Brigade over which news of calls from all parts of London is transmitted. It was reported that no apparent damage was done to the apparatus and it so happened that there were no messages calling for attention during the time the discharges induced by the storm were taking place amongst the instruments. There can be little doubt, however, that had the telephones been used some discomfort would have been experienced, not to say real injury sustained, by the person who may have employed the instruments at the time. Both telegraphic and telephonic services may become a source of danger during great electrical stress in the air and persons should be warned against using the instruments at such a time and certainly when alarming symptoms of a storm manifest themselves in the way just described. The incident suggests unpleasant possibilities in the case of electric wiring in the house, for in this way atmospheric electricity may possibly be an occasional factor in the origin of an outbreak of fire.

HAIR-BALLS IN THE STOMACH.

IN the stomachs of many of the lower animals hair-balls are liable to form, and they are especially common in cattle. The hair is licked from the surface of the body, is carried into the stomach and is there subjected to a churning movement by which it is moulded together into a compact mass. This is greatly facilitated by the tendency to "felt" which is possessed in a high degree by the hair of cattle, so that these hair-balls are firm round bodies and show on section a lamination corresponding to the successive deposits of hair. In the human being hair is but rarely swallowed, though sundry cases are on record in which the practice has existed. In many of the persons in whom hair-swallowing occurs there has been a history of insanity, yet it has been seen in those who had no other sign of mental derangement. A large majority of the patients are women. Human hair has but little tendency to "felt," because its surface is comparatively smooth and therefore we practically never find in the human stomach hair-balls resembling those found in the lower animals. Generally in human beings the hair forms a somewhat loose mass conforming more or less to the shape of the stomach. The quantity of hair present may be very great. Mr. George May published a case in the *Medical Association Journal* of Dec. 28th, 1855, in which the mass of hair weighed 26 ounces. Mr. J. Knowsley Thornton[1] has recorded a case where the weight of the foreign body was two pounds. Dr. Russell published in the *Medical Times and Gazette*, vol. i., 1869, p. 681, a case in which the mass of hair weighed four pounds seven ounces, but larger still was the amount of hair in a case under the care of Mr. Paul Swain[2] for it weighed five pounds three ounces. It is not surprising that masses like these form very obvious swellings in the abdomen and we publish in the present issue of THE LANCET an account by Dr. H. Mallins of a case where the abdominal swelling was large and at the necropsy it was found to be due to a mass of hair in the stomach weighing one pound nine ounces. In a few instances the presence of a foreign body has been diagnosed and the mass has been successfully removed by a gastrotomy. This was done in Mr. Thornton's case and in Mr. Swain's case mentioned above. Schönborn[3] has also published a successful case, and a fourth is recorded by Berg of Stockholm. Unfortunately in most cases the accumulation of hair has only been discovered at the post-mortem examination.

THE MOTOR-CAR PROBLEM.

Sir Ralph Payne Gallwey in a recent letter to the *Times* makes a suggestion which we can hardly expect to see carried out but which nevertheless deserves serious consideration. He says:—

> As a sure means of identifying the reckless "don't-care-a-hang-for-anybody" motor-car drivers, the class of men who daily imperil our lives and who are responsible for the "motor murders" that too frequently occur, I would suggest a legalised use of the shot-gun. In the case of a motorist—by wilful neglect of ordinary precautions—inflicting injury on a pedestrian, or causing damage to the property of a person driving or riding on the highway, followed by an attempt to escape detection by continuing his rapid progress, I consider the injured party should be legally permitted to fire at the offender. The gun not to be used at a range exceeding 40 yards and the shot with which it is loaded not to be of a larger size than No. 8 or 9.

Sir Ralph Payne Gallwey goes on to say that the motorist would only be shot in the back and that he could easily be identified by the shot holes in his clothes when these were removed by the police of the town receiving an intimation by telegraph to detain him. Probably the offending motorist would avoid the next town, but although the point raised by Mr. W. S. Gilbert in his letter to the *Times* of June 3rd as to the ultimate career of the car must be remembered the idea is distinctly good and might be applied with advantage to many other nuisances, as, for instance, "winner" yellers, piano organists or preferably piano organs, advertisement vans and the idiot upon them who blows a horn, German bands, and the like. As we write a huge traction engine is going along the Strand dragging three enormous trucks loaded with blocks of wood for wood-paving. This sort of traffic should not be allowed in London and the driver of the engine is not responsible, so we fear that in this case the shot-gun would not do, but some of these days an aggrieved ratepayer will call on the contractor or on the borough council who employ him armed with a similar weapon.

[1] THE LANCET, Jan. 9th, 1886, p. 57.
[2] THE LANCET, June 22nd, 1895, p. 1581.
[3] Langenbeck's Archives, 1883, vol. xxix., p. 609.

The principle of the shot-gun could be carried out just as effectually and without danger to life by casting a dose of indelible dye over the driver. It would be a comparatively easy matter to supply the police with a rapidly acting dye-squirt and the offender would certainly be marked and the marks unmistakeable. If Sir Ralph Payne Gallwey's suggestion is worth anything at all it would be better and more humane to make the target not the driver but his air tyres. That would effectually disable him, we fancy, without the drawback pointed out by Mr. W. S. Gilbert. Another method of pulling the motor-car up in obedience to a signal would be to have a platform in the road provided with sharp points which could be made to present themselves when occasion demanded.

THE PREVALENCE OF SMALL-POX.

IN his report for the four weeks ending May 16th Mr. F. W. Alexander, medical officer of health of the borough of Poplar, states that since his last report to the public health committee on April 24th nine more cases of small-pox have occurred in the borough in connexion with a patient living in Ford-road. This patient was removed to the small-pox hospital on April 20th and the other nine inmates of the house who had been exposed to the infection were taken to the council's shelter, Glaucus-street, Bromley, as mentioned in THE LANCET of May 16th, p. 1392. They were vaccinated on April 21st, a date which was, of course, at least a fortnight too late for successful prophylaxis, and they were all removed from the shelter to the small-pox hospital on various days from April 29th to May 18th. Four more cases have occurred since that time in a laundry in Poplar. The recent history of the incidence of small-pox in Poplar seems to show that there was an associated group in which one patient was the means of infecting 19 others. The Local Government Board of Scotland intimates that during the period from May 16th to 31st inclusive six cases of small-pox have been reported to it from the burgh of Dundee, one from the burgh of Glasgow, and one from the burgh of Coupar Angus.

ACUTE GRAVES'S DISEASE WITH MANIA.

IN the *Quarterly Medical Journal for Yorkshire and Adjoining Counties* for May Dr. F. R. B. Atkinson has described a remarkable case of acute Graves's disease with the rare complication of mania. A man, aged 55 years, was seen on July 18th, 1902. He had felt ill for a month and he complained of languor, hoarseness, loss of flesh, and palpitation. He received a severe shock about 12 months before in consequence of loss of money and had never been himself since. He was nervous and irritable and his speech was very rapid. The thyroid gland, especially the right lobe, was much enlarged and pulsation of the carotids was visible. There was no proptosis but his wife said that his eyes stood out at times. There was marked pulsation over the whole cardiac area and in the epigastrium. The heart was enlarged and there was a systolic thrill but no murmurs were heard. The pulse was 108, small, and intermittent. Gräfe's, Stellwag's, and Möbius's signs were absent. The patient rapidly became worse and on August 23rd diarrhœa and vomiting with tremors of the arms and legs, and sometimes of the jaw, set in. Speech became much faster and at times was unintelligible. On the 29th he cried and at night became maniacal, talking nonsense and shouting. He could only be kept in bed with difficulty. The right pupil was dilated. The pulse was 130 and on the patient rising in the bed it became 140. Stellwag's sign was present. On Sept. 1st the *tache cérébrale* could be obtained and there was marked delirium. On the 3rd the temperature was 101° F. and there were dysphagia and râles at the bases of the lungs. He was evidently dying. On the 4th he was unconscious and his legs moved up and down continuously in a choreiform manner. The goitre was much smaller and the pupils were equal. Death occurred at noon. Dr. Atkinson thinks that the dilatation of the right pupil was probably due to irritation from pressure of the right lobe of the thyroid. Its disappearance before death is explained by the diminution of the thyroid. Mental disturbance in Graves's disease usually takes the form of melancholia. Dr. Atkinson has collected 25 cases in which mania occurred. Of these 17 were fatal. The disease in the present case was remarkably acute; its total duration appears to have been only two and a half months.

"THE DIRTY FOUNTAINS IN TRAFALGAR-SQUARE."

WE are glad to find that our remarks last week upon the dirty condition of the water of the fountains in Trafalgar-square have raised considerable public comment on this matter. We learn that the water which supplies the fountains is, as a matter of fact, identical as regards its source with the water supplied to Buckingham Palace, Marlborough House, the Houses of Parliament, and the Government offices. The source is an artesian well and the water is pumped into tanks in Orange-street, which are connected by a horizontal tunnel 400 feet in length which forms a reservoir with a capacity of 112,000 gallons. It would be interesting to determine the composition of the water supplied to the Royal residences and the Government offices in order to discover any essential differences which exist in relation to organic purity between the water of the fountain and this drinking supply. Should analysis show—and we should not be surprised—a condition similar to that of the water derived from Aldgate pump a few years ago this source of supply would have to be discontinued. We understand, however, that for the sake of economy the water pumped to the fountains is used over and over again. If that is the case instead of being things of beauty and purity the fountains are circulating and disseminating filth in the manner indicated by the analysis which we published last week. Apart from fountains Trafalgar-square is a disgrace. This "finest site in Europe" is little better than a refuse catchment area patronised chiefly by ragged urchins and dirty people. We are glad to see the suggestion that the asphalte area should be converted into "a glowing parterre of colour" by removing the asphalte altogether and replacing it with grass and flowers.

QUACKS IN GERMANY.

IN the *Standard* of June 1st appears the following message from the special correspondent of that journal at Berlin dated May 31st:—

> The Imperial Home Office has addressed a circular to the Federal Governments on the subject of quack medicines and doctors. It proposes that stringent measures shall be taken against what is described as a growing evil, which, it is said, has assumed proportions in Germany which are decidedly dangerous to the public welfare. Amongst the measures proposed is one for the compilation of a register in which all the names of all quack doctors have to be entered. It is also proposed that obvious exaggerations in newspaper advertisements by quacks shall be prohibited. The police, it is suggested, should be authorised to prevent quacks from exercising their calling whenever there is reason to believe that a continuation of their practice would be injurious.

We wonder when our Imperial Government will take a similar step. A press censorship does not exist in these islands and to the credit of British journalism such a censorship as regards the body of a journal is not needed. But when we look at the advertisement columns the case is different. Journals of the highest standing insert page advertisements of such well-known quackery as the Drouet Institute, while the advertisement columns of the popular monthly magazines are crammed with notifications of all sorts of quack remedies, including those emanating from

the scoundrels who trade on the fears of sexual hypochondriacs. The flagrant advertisements from abortionists seem to have received a check owing, we think we may say, in great part at least, to the articles which appeared in our own columns on the matter, but "Dr." Bell and others of his kidney still advertise their deceptions in newspapers and magazines and distribute lures for dupes broadcast with the connivance of His Majesty's Postmaster-General. Such things should not be and the sooner that our Government takes up the matter the better.

THE WORTHLESSNESS OF ABSENCE OF LIVER DULNESS AS A SIGN OF PERFORATION OF THE STOMACH OR INTESTINE.

IN THE LANCET of April 18th, p. 719, we published an annotation in which we drew attention to the uselessness of the absence of liver dulness as a sign of free gas in the peritoneum, though many still attach some value to this physical sign. Dr. Charles Viannay of Lyons has brought to our notice a paper which he read when he exhibited a specimen of very great interest at the Société des Sciences Médicales de Lyon on Dec. 17th, 1902, and which was published in the *Lyon Médical* of Feb. 8th, 1903. Dr. Viannay is prosector to the Faculty of Medicine of Lyons and in the dissecting room he found a liver which showed on the upper surface of its left lobe a well-marked impression due to the transverse colon, a loop of which had insinuated itself between the upper surface of the liver and the diaphragm. The body was that of a woman, about 40 years of age, who had died from an extensive cellulitis of the neck. The liver weighed 1320 grammes (42½ ounces) and bore evident traces of constriction from the corset, for the upper surface of the right lobe showed four long and deep costal impressions. The gall-bladder was hidden under the ribs near the hepatic flexure of the colon, to which it was attached by old adhesions. The right half of the transverse colon was adherent to the anterior edge of the liver, under which it was lying as far as the falciform ligament. Immediately to the left of this ligament the colon turned round the anterior border of the liver and formed a large loop which passed later over the front of the stomach to the splenic flexure. This condition is rare, but Dr. Viannay has discovered other instances of it. Mauclair and Mouchet [1] described a case where the transverse colon formed a loop between the right lobe of the liver and the diaphragm, passing as far back as the coronary ligament. Cohan [2] saw four cases in which a similar condition obtained. Other instances have also been recorded. It is obvious that such an interposition of bowel between the liver and the abdominal wall would cause absence of more or less of the liver dulness according to the amount of bowel involved, and therefore absence of the hepatic dulness can have no value as an indication of perforation. In the discussion which followed the reading of the paper which we have mentioned Dr. Mouisset remarked that the liver dulness may be absent for several reasons and Dr. Jaboulay said that he had seen the liver dulness absent in cases of gaseous cysts of the intestine.

THE Harveian Lectures of the Harveian Society of London will be delivered by Dr. D. B. Lees on Nov. 5th, 12th, and 19th of this year at the Stafford Rooms, Tichborne-street, Edgware-road. The subject of the lectures will be the Treatment of some Acute Visceral Inflammations.

WE regret to announce the death of Mr. Alfred Haviland, M.R.C.S. Eng. Mr. Haviland, who passed away on June 1st at the age of 78 years, will be remembered as having done much excellent work on the subjects of medical geography and climatology as concerned with the distribution of disease.

THE annual dinner of the Indian Medical Service will be held at the Café Monico, Piccadilly-circus, on Thursday, June 11th, at 7.45 P.M., when the chair will be occupied by Surgeon-General Sir Annesley De Renzy, K.C.B. Officers intending to be present should communicate at once with the honorary secretary, Mr. P. J. Freyer, 46, Harley-street, W.

Dr. J. J. R. Macleod assistant demonstrator of physiology at the London Hospital, has been appointed Professor of Physiology at the Western Reserve University, Cleveland, Ohio, which celebrated its sixtieth anniversary this year. Dr. Macleod graduated in 1898 with honours at the University of Aberdeen.

Dr. W. Collingridge, medical officer of health of the City of London, will preside at the eleventh annual meeting of the Church Sanitary Association at the Church House, Westminster, S.W., on Wednesday, June 24th.

THE annual dinner of the Royal Army Medical Corps Militia will be held on June 8th at the Trocadéro Restaurant, Piccadilly Circus, London, W., at 8 P.M. Medals and orders will be worn.

THE CORONERS' SOCIETY OF ENGLAND AND WALES.

ANNUAL MEETING.

THE annual meeting of the Coroners' Society of England and Wales was held in the Holborn Restaurant on May 28th. Mr. H. J. ROBINSON (Blackburn and Burnley), the retiring President, was in the chair and about 50 gentlemen were present.

The minutes of the last annual meeting having been adopted the election of officers for the forthcoming session was proceeded with. Mr. J. BRADLEY (Birmingham) proposed Mr. Henry White (Hants and Winchester), the senior vice-president, for election to the office of president, remarking that the gentleman was a very old member of their council and most diligent in his attendance. Mr. SPENCER CLARKE (Hants) seconded the motion which was carried unanimously.

Mr. WHITE then took the chair and in thanking his proposer and seconder said that the experience of the latter as a coroner went back for 40 years, while he himself (Mr. White) had now been a coroner for nearly 30 years.

A vote of thanks to Mr. Robinson, the retiring president, was proposed by the new PRESIDENT, seconded by Mr. G. E. ROUMIEU (Surrey), and carried unanimously.—On the motion of Mr. ROBINSON, seconded by Mr. T. CHRISTOPHERS (Warwickshire), Mr. S. F. Butcher (Bury) was re-elected as a vice-president and Mr. G. Perceval Wyatt (London and Surrey) was chosen to succeed Mr. White as a vice-president.

The PRESIDENT, in proposing the re-election of Mr. Walter Schröder (deputy coroner for London Central District) as honorary secretary, said that everyone knew something of the work which Mr. Schröder had done in that capacity. It was to all of them a source of extreme gratification when Mr. Schröder expressed his willingness once more to undertake the duties of the office.

Mr. BUTCHER indorsed all that had been said by the President in Mr. Schröder's praise and at the same time seconded the motion which was carried unanimously.

Mr. SCHRÖDER, after thanking the meeting for his election, remarked that the report which he had prepared was somewhat lengthy on account of the number of subjects which had to be dealt with. By way of appendix to the report he had been able, through the courtesy of Messrs. Benholme, the proprietors of a local newspaper at Colchester, to reproduce an illustration of treasure-trove found in that ancient city. The report contained another illustration

[1] Bulletin de la Société Anatomique, 1896, p. 600.
[2] Recherches sur la Situation du Colon Transverse. Thèses, Paris, 1897-1898, tome II.

reproduced from the *Sphere* by the courtesy of the Nineteen Hundred Publishing Syndicate, Limited, who lent the engraved block, and by permission of the family of the late Mr. Wakley. This was a copy of an old print of an inquest held by Mr. Thomas Wakley, M.P., by whose side, on the left, stood Charles Dickens. Mr. Schröder was of opinion that the inquest there depicted was held in central London, probably in St. Pancras, and that the sketch was by George Cruikshank, whom he knew. On several occasions that artist attended inquests held by the late Dr. Lankester and Dr. Hardwicke and it was quite possible that he was present at some held by Mr. Wakley.

Mr. Perceval Wyatt was then re-elected honorary treasurer and some vacancies on the council were filled.

Mr. SCHRÖDER, the honorary secretary, moved the following addendum to Rule 1 of the society:—

And that coroners and deputy coroners outside England and Wales be admissible as extraordinary or corresponding members.

The need of this addition to their rules was, he said, to enable coroners in other parts of the empire and elsewhere to join the society as corresponding members; any coroner in Ireland, for instance, who might wish to join them could do so in this way. The motion was seconded by the coroner of Rochester and carried unanimously.

The meeting then proceeded to consider the council's report.

On the motion of Dr. AMBROSE, seconded by Mr. J. BELL, the subjoined motion was carried:—

That this annual meeting of the Coroners' Society desires to call attention to the present unsatisfactory state of the law dealing with the provision of places for the holding of inquests and the performing of post mortem examinations and requests the council to approach the Home Secretary on the matter.

The meeting closed with votes of thanks to the honorary secretary and the honorary treasurer for their services during the past year.

ANNUAL BANQUET.

The annual banquet of the society took place on the same evening. The President was in the chair and a large number of coroners and guests were present.

After the loyal toasts had been duly honoured Mr. BUTCHER gave "The Houses of Parliament," the toast being acknowledged for the House of Lords by Lord MONKSWELL, chairman of the London County Council, in a humorous speech. Mr. LUKE WHITE, who responded for the House of Commons and is himself a coroner, dwelt upon the part played by coroners in the securing of domestic legislation and in promoting the interests of the poorer classes.

"The Imperial Forces" was proposed by Mr. I. BRADLEY, coroner for Birmingham, who remarked upon the voluntary character of the services rendered by the Imperial forces and paid a special tribute to the work and character of the police. This toast was responded to by Major READ.

Mr. MACMORRAN, K.C., in proposing "The Coroners' Society," observed that the society was established in 1846 to protect and to further the interests of coroners. But since then its scope had been very much enlarged and not only had it been the means of helping to raise the status of the coroner largely in public esteem but it had done good work in the interests of the people and was now a real power in this kingdom, its advice being often sought and the voice of the society having weight in influencing legislation in many ways. He also remarked that, at all events in London, inquests were rarely held as of old in public-houses, but that coroners' courts, mortuaries, and post-mortem rooms had been provided by the county council and local authorities which had long been suggested and urged by the society. He gave "The Coroners' Society, long may it prosper."

The PRESIDENT, in replying, said that in no other case did more depend upon the man and less upon the office than in that of a coroner; for a coroner had to exercise much tact and to show great judgment in discharge of the various difficult duties which fell to his lot. He referred to their relations with the poorer classes of His Majesty's subjects, to the services that coroners were able to render in assisting in bringing about legislation of benefit to them, and to the many cases of sorrow and sadness which came before them and in some of which they were able to give balm and comfort in times of deep distress. In concluding he remarked that he thought that inquests held in public-houses would soon be a thing of the past.

The health of the retiring President, Mr. Robinson, was then proposed and suitably acknowledged.

The toast of "Our Guests" was given from the chair in cordial terms and briefly responded to by Sir A. de RUTZEN.

"The Officers of the Society" coupled with the name of the honorary secretary, was the last toast, in proposing which the PRESIDENT referred to the pleasure it gave the members that Mr. Perceval Wyatt should retain the treasurership in addition to the vice-presidency to which he had that day been elected. The services which Mr. Schröder had rendered to the society were much appreciated, and it was a matter of great gratification to him personally and to the members generally that Mr. Schröder had consented to continue as their secretary.

Mr. SCHRÖDER, in replying, said that it was with some diffidence that last year he took office, as he had little spare time at his disposal, and especially as he had not the advantage of being either a medical or a legal man, to say nothing of the combination of both law and physic possessed by many coroners in the present day. However, favouring circumstances of many years of coroner's work had enabled him to gain a somewhat extensive experience of the law and practice of the coroner's court which had served him in good stead and he was glad to find had proved useful to others. He had long recognised that reforms in the coroner's court might be made with beneficial effect to meet the changing condition of the times and to insure greater uniformity in practice and with advantage to the public interests. His desire was to help forward any such movement and in using his endeavours to that end he felt sure that he would thereby assist in maintaining the dignity and honour of the office of coroner. He would always be pleased to do all he could for the benefit of the society.

The pleasure of the evening was enhanced by some excellent vocal music.

ARMY MEDICAL DEPARTMENT REPORT FOR 1901.

THE Army Medical Report for 1901 has just been issued. In addition to the usual statistical returns and statements regarding the health and sanitary condition of the troops serving at the various stations and commands at home and abroad it contains a report on the Progress of Hygiene for the year 1901–02, by Major R. H. Firth, R.A.M.C., professor of military hygiene in the Medical Staff College, London; a list of Operations with Notes on the more interesting Operation Cases and Remarks on the Work in the Surgical Division of the Royal Victoria Hospital, Netley, during the year 1901–02, by Colonel W. F. Stevenson, C.B., R.A.M.C., the professor, and Lieutenant-Colonel W. Dick, R.A.M.C., assistant professor, of military surgery at the Army Medical School; and a Report on the Medical History of the China Campaign of 1900–01.

To begin with the excellent prefatory summary statement as to the health of the troops at home and abroad we may usefully refer to some of the more salient points presented.

The average strength of the European troops, exclusive of those in South Africa, in 1901 was 196,796 warrant officers, non-commissioned officers, and men. The total number of admissions to hospital was 172,908 and the total deaths were 1762. The admissions represent a ratio of 878·6 per 1000 of strength; the deaths one of 7·70 per 1000 on a strength of 228,816, which includes detached men not shown in the returns received.

As regards the troops serving in the United Kingdom there is nothing which strikes us as calling for special remark. The admission and constantly sick rates were higher and the mortality rate was lower than in 1900. There were 157 admissions to hospitals and 39 deaths from enteric fever. An outbreak of that fever at Portland was supposed to be due to the mingling of returned South African convalescents with young soldiers in their barrack rooms, conditions which it need scarcely be said were soon remedied.

At Gibraltar the health of the troops was favourable as compared with 1900. There were less enteric fever and a marked decline in the admission rate for venereal disease. In the Malta command, which included Crete, the admission, mortality, and constantly sick rates were slightly

higher than in the previous year. Ague was very prevalent in Crete in 1901—indeed, the disease was epidemic there during the latter portion of that year. It is pertinently remarked that in the native town of Kandia, which is close to the camp, mosquitoes of the anopheles and culex species abound and there is also a large marsh not many miles off. The health of the troops in Canada was good on the whole. In Bermuda the decline in enteric fever previously reported was maintained in 1901. We notice that five admissions and four deaths from yellow fever at St. Lucia are recorded, attributable, it is alleged, to the probable importation of the disease into the colony by shipping from South America. As regards South Africa it has to be borne in mind that no annual returns of sick have been submitted and that consequently no statistics for comparative purposes can for the present be prepared. The health of the troops in Mauritius was on the whole good. There was an increase in the prevalence of malarial fevers as compared with 1900. The troops had escaped plague which was prevalent throughout the island. In Ceylon it is mentioned that there were a large number of cases of enteric fever among the Boer prisoners of war at Diyatalawa camp and that three cases of enteric fever occurred among the men of the military guard at that camp. The health of the troops in the Straits Settlements is stated to have been most satisfactory. Two admissions from plague, both of the cases being fatal, occurred among the troops serving in China, where the disease, it will be remembered, was epidemic among the civil population in 1901.

In India there was a decrease in the admission, mortality, and constantly sick rates, but an increase in that of invaliding. The chief causes of sickness, as usual, were malarial fevers and venereal diseases, which together caused 52·11 per cent. of the admissions for all diseases. As regards enteric fever, it is noted that not since 1887 has there been a lower admission rate, while the death-rate is less than in any year since 1884. The cessation of the usual reliefs and the retention of time-expired men in the country are cited as agents in bringing about the reduction, but credit would also appear to be due to the greater care taken with regard to soldiers' food, drink, and sanitary surroundings, and to the absence of field service, although it still remains to be seen what effect the arrival of large drafts of young soldiers will have on the prevalence of the disease. During the year only 12 fatal cases of cholera occurred and there were also two admissions for plague, one case resulting fatally.

In Egypt the admission, death, and constantly sick ratios were higher than in 1900. Influenza caused 361 admissions, all the cases occurring at Cairo, where the disease assumed an epidemic form in July, August, and September. The ratio of admission for enteric fever was practically the same as in the previous year.

THE MEDICAL DEFENCE UNION.

ANNUAL GENERAL MEETING.

THE annual general meeting of the Medical Defence Union was held on May 21st at 4, Trafalgar-square, London, Mr. M. A. MESSITER, the PRESIDENT, being in the chair.

The report of the council, to which we refer more fully below, contained a satisfactory account of the successful progress of the union.

The PRESIDENT, in moving the adoption of the report of the council, said that the union was full of vigour and reviewed the work carried through in 1902, describing it as excessive, varied, and important. Questions dealing with unqualified practice, medical aid societies, advertising, covering, libel, slander, malpraxis, boards of guardians, hospital boards, and infectious diseases had been fought out on the principle of never compromising in any case and in every one the union had been successful.

Dr. W. S. A. GRIFFITH seconded the motion and said that in his opinion if the entrance fee was made one guinea instead of 10s. the council would be doing a right and proper thing.

After some discussion the report was adopted unanimously.

The adoption of the accounts for 1902 was proposed by Dr. HEDLEY HILL, seconded by Dr. J. T. MACNAMARA, and carried unanimously.

On the motion of Dr. H. CAMPBELL POPE, seconded by Dr. W. RIGDEN, provision was made for the payment of railway fares to the members of the council attending meetings from the provinces.

The meeting terminated with a vote of thanks to the executive after the re-election of the following members of council: Dr. M. Beverley, Mr. T. Garrett Horder, and Dr. W. Rigden.

ANNUAL REPORT.

We have received a copy of the annual report and statement of accounts for the year 1902 of the Medical Defence Union. The objects of the union are too well known to need detailed repetition here and the council and members may be congratulated on the continued and satisfactory progress of the society. During the past year 896 new members were elected, a number which in itself is sufficient proof that the efforts exerted by the managing council have received due approbation at the hands of the profession in general; for not only does the society concern itself with the affairs of its members but also undertakes the prosecution of unqualified persons when such cases are brought under its notice and also conducts cases before the General Medical Council when alleged grave unprofessional conduct is imputed. The services thus rendered to the whole of the medical profession are very great and deserve the recognition which has been accorded during the past year in the shape of the greatly increased entry of new members. In the report before us several cases are recorded in which the union has been of public service. Especially noteworthy is the prosecution of a man who passed under the names of Dr. Hoffmeister, Dr. Dobie, and Dr. Elliott, and who was charged with manslaughter and perjury. It was entirely due to the efforts of the union that he was finally traced, arrested, and sentenced to five years' penal servitude. During the trial a very important ruling was propounded by Mr Justice Bigham. He pointed out to the jury that the prisoner went under three false names, all of which were upon the Medical Register, but none of these was his own name. This fact was not in itself evidence of negligence, but if a man like the prisoner did hold himself out to have medical skill he gave it as his opinion that the act constituted in itself gross negligence and directed the jury to take this as his ruling on that point.

Another striking point in the report is the varied nature of the claims for advice and assistance which are dealt with by the general secretary (Dr. A. G. Bateman). Information was sought on the Acts of Parliament dealing with lunacy, inquests, the Poor-law, vaccination, public health, employers' liability, notification of disease, vivisection, the law of partnership, coroners, and other points requiring legal assistance. When advice of this nature is sought the matter is promptly dealt with, Dr. Bateman or the solicitor to the union, Mr. W. E. Hempson, at once taking action if the case is so urgent as not to be capable of postponement until the next meeting of the council or of the executive committee.

The influence of the union is making itself very generally felt, not only amongst its own members for their own benefit but also in other ways, as explained by Mr. Hempson in his report. The chief items of expenditure were incurred in cases in which, although the union has proved successful, it has been unable to recover any portion of the costs owing to the pecuniary position of the litigant. The man who has nothing to lose has everything to gain and if he can find a solicitor who is prepared to conduct a case on the chance of securing either a favourable compromise or a verdict in his client's favour then the litigant is well content. But solicitors of this class are now extremely wary of carrying an action to any great length when they find that the medical man concerned is a member of a society for medical defence. In many cases it is quite sufficient for the secretary of the society to write and to inform those solicitors that the case has been placed in the hands of the society for the action to be at once abandoned.

At the present time the membership of the union is approximately 6000. An enormous number of cases were dealt with during the year, as a glance at the schedule of cases selected from the minute-book will show. 155 cases were referred to the solicitor, all of which necessitated either legal action being taken on behalf of the members concerned or legal advice and assistance being accorded to them. One important change in the management of the union during the past year was effected by an entrance fee of 10s. being

imposed upon all new members. Although the funds of the union are in a perfectly stable condition yet the number of cases which require aid and advice has increased rather than diminished and the necessary cost of taking action before the legal tribunals makes a heavy inroad into such funds. It is true that, owing to careful management, the union has had for many years (and has at the present time) a balance in hand at the termination of each financial year, but at the same time it was felt very strongly that this margin of income over expenditure was not sufficient to relieve the council from some measure of anxiety at the close of each year when heavy legal costs have to be met. After prolonged and careful consideration, therefore, the council decided to adopt the imposition of an entrance fee. We have no doubt that the decision was a right and just one. Increase of membership means increase of responsibility and the sum of 10*s.* will, we feel assured, have no deterrent effect in preventing the entrance of new members. Medical men, no matter which branch of the profession they take up, are constantly liable to be attacked by impecunious and malicious individuals for the purpose of levying blackmail. It is therefore of the greatest comfort to a practitioner to feel that he has support behind him upon which he can rely to assist him with the best legal advice without the ruinous costs which may ensue if he has to meet the charge entirely on his own behalf. We heartily wish the union and other similar societies continued success.

MEDICINE AND THE LAW.

A Case under the Dentists Act.

AN unqualified person practising dentistry was recently summoned under the Dentists Act (41 & 42 Vict. C. 33, Sec. 3) for unlawfully taking and using an addition or description, "R.D.S. Eng., Surgeon Dentist," implying that he was registered under the Dentists Act, 1878. The magistrate dismissed the summons and the Divisional Court has now upheld his decision on the ground that it was one of fact and consequently not one with which the court could interfere, its duty being to hear appeals upon questions of law only. The facts alleged are peculiar and the result may be somewhat serious if unqualified practitioners of all kinds take to following the example set them in this case, unless it can be shown that in such circumstances some other offence than that of taking a title implying qualification is committed. The defendant in the case under consideration bought the practice of a properly qualified dentist who had died, took over the premises in which the deceased had practised, and put up on the front railings his own name upon a marble slab, thus: "Mr. W. Lawson Whitlock, 10–5." He also left up the name of his qualified predecessor in all the places in which that gentleman had put it, with the result that "Mr. R. C. Stent, R.D.S. Eng., Surgeon Dentist," appeared in two places on or about the house and in another "Messrs. Stent, Surgeon Dentists. Est. 1840. Hours of attendance 10 to 6 or by appointment." To a patient he appears to have said in answer to a question as to whether he was Mr. Stent, "Mr. Stent is dead: I am Mr. Whitlock." These were the facts alleged as evidence that the defendant had "taken and used" titles implying that he was possessed of qualifications to practise dentistry. It is clear that a natural result of what was done would be to cause persons going to the house to think that the person operating on them was qualified, but that was not the offence charged. Upon the question of the taking and using the Lord Chief Justice intimated that he himself might have come to a different conclusion from that of the magistrate had he occupied his place, but that did not entitle him to say that there must be a conviction. The magistrate's decision in such cases has been held to be one of fact, not of law, the result of which is that as long as there is evidence upon which it can have been founded the Divisional Court will not disturb it. It will be observed that the case commented on was not one of the ordinary instances of taking and using a description implying qualification; it was probably not a case contemplated by those who framed the Act and consequently the language used was not sufficient to meet it. At all events if any unqualified person adopts the same course as Mr. Whitlock in the future he will do so with impunity, unless either the magistrate before whom he is brought takes a different view from that of the gentleman before whom Mr. Whitlock appeared or a different charge, based possibly upon the inducing patients to believe him to be qualified, can be sustained. If no penalty can be enforced for such conduct the prospect is somewhat serious. The practice of a deceased qualified medical practitioner or dentist may be worth very little to the executors, but the right, if right it can be called, to put his own name-plate under one which records recognised qualifications may be worth a great deal to a quack. Moreover, it is not absolutely clear that the right need be acquired in the sense in which Mr. Whitlock acquired it or that there need be any show of right at all. If Mr. Whitlock had put up a wholly fictitious name with wholly fictitious qualifications he would not apparently have been held by the magistrate to have been taking and using an addition or description within the Act, for the magistrate evidently thought that the addition or description must be appended to the name of the user of it in order to constitute the offence. A person so using a fictitious name might be convicted if charged with obtaining money by falsely pretending that he was a qualified person, but prosecutions of this kind are not always easy to bring to a successful conclusion and it is a matter to be regretted by the public and by the medical profession that the Medical Acts should not afford them the certainty of protection upon such occasions.

The Registration of Children.

The lady, named Bedford, who was convicted and fined £10 by Sir Albert de Rutzen for giving false information to a registrar of births concerning the birth of a child, was perhaps fortunate in that prompt discovery followed her action. Apparently she was desirous of adopting a child. What the motive may have been we need not inquire or discuss, but she obtained a female child from a young single woman who had recently been delivered, and not content with taking the infant and treating her as her own she caused her to be registered as having been born at an address in Upper Woburn-place, and gave her own name and that of her husband as the names of the parents. In Mrs. Bedford's case the unexpected appearance of a child apparently provoked immediate surprise and comment. In some families where the members are scattered and live without communicating with one another, such deceit practised upon a registrar might easily pave the way to serious confusion and error in the future. Apart, however, from the possible perpetration of fraud, the registers of births, marriages, and deaths play so important a part in the organisation of the protection of the public health and safety and are so difficult to maintain with the desired accuracy that any attempt deliberately to falsify them deserves very severe punishment indeed.

An Undesirable Midwife.

At Dewsbury a midwife who failed to put in an appearance at an adjourned inquest was recently ordered by the coroner to be arrested and imprisoned for 24 hours. At the opening of the inquest on a previous day she had arrived under the influence of drink and had been severely censured by the coroner. A medical man who had made a post-mortem examination of the infant's body which formed the subject of the inquiry stated that death was due to insufficient inflation of the lungs and the jury found a verdict of "Death from natural causes aggravated by want of attention at birth." The medical witness stated with regard to the midwife that it was six years since he had attended a confinement at which she had been engaged and that he had then warned her not to go near any case with which he might be connected on account of her filthy and drunken habits. She had been fined for being present at a confinement after attending an infectious case. The Midwives Act will, doubtless, in time provide protection for the poor against such persons as this. The name of "Mrs. Hardy" is not likely to appear upon the roll of midwives as having practised as a midwife and borne a good character so as to enable her to be registered before April, 1905.

THE CENTRAL MIDWIVES BOARD.

A MEETING of the Central Midwives Board was held on May 28th at the Privy Council Office, Whitehall, when the following business was transacted: 1. A letter was read from the secretary of the Liverpool Ladies' Charity and Lying-in Hospital praying for the recognition of its certificate in midwifery as a sufficient qualification under

Section 2 of the Midwives Act, 1902. The secretary was instructed to reply that the application would have the careful consideration of the Board when it came to deal with the question of the acceptance of "other" certificates under Section 2. 2. A draft form of notice of the effect of the Act for the use of local supervising authorities was considered, amended, and approved. 3. The secretary reported as to negotiations for acquiring suitable offices for the Board and further instructions were given to the sub-committee in charge of the matter. 4. The secretary was instructed to prepare for the consideration of the Board at its next meeting draft forms of (*a*) Midwives Roll and (*b*) certificate under the Act.

THE MEDICAL, SURGICAL, AND HYGIENIC EXHIBITION.

THIS annual exhibition was opened at Queen's Hall, Langham-place, on June 2nd and the continued interest shown alike by exhibitors and visitors in the proceedings affords evidence of the success of the scheme which was instituted seven years ago. Undoubtedly members of the medical profession find a visit, however short, to this exhibition instructive, judging from the numbers known to attend and the organisers may be congratulated on the practical encouragement that they have received in past years. The movement which they initiated has now become a regular institution which is appreciated by medical men, pharmacists, public health officers, and others.

It can hardly be expected that each year the exhibition can be exclusively devoted to absolute novelties, nevertheless a number of novelties will as a rule be found to attract the attention of the visitor. This year special foods and food products undoubtedly predominated over drugs and surgical appliances, although sanitary appliances seem to occupy a larger share of the space than on former occasions. By far the majority of the food preparations shown have already received attention in THE LANCET Laboratory, the results of their analysis having been presented to our readers from time to time. We may mention, for instance, the food preparations of the Shredded Wheat Co. (6 and 8, Eastcheap, London, E.C.), including the shredded whole wheat biscuit which contains the entire constituents of wheat and the solubility of which has been increased by the special process adopted during its manufacture. A recent introduction of this company is the "triscuit" which is a wafer formed of shredded wheat containing the constituents of the wheat intact in a palatable form and shape. Quite recently we recorded the results of analysis of some of the Telma foods (Telma, Limited, 57, Fenchurch-street, London E.C.), which consist generally of malted cereals of an easily digestible character and also of high nutritive value. One of the first preparations to contain the casein of milk was "protene," upon which we reported some years ago. This product is added to bread, biscuits, chocolate, and cocoa, with obvious dietetic advantage. We have also recorded our laboratory experience of the dietetic value of peptenzyme (Carnrick) of the Peptenzyme Company (80, Gloucester-road, South Kensington, London, S.W.). We were able to confirm the activity of this preparation by which it is able materially to help the processes of nutrition. The maltine preparations of the Maltine Manufacturing Co. (25, Hart-street, Bloomsbury, London), are also well known and it is evident that these preparations maintain their standard position amongst food adjuncts. We expressed our opinion a short time ago on the preparation then called primox but now known as vegox, supplied by Primox, Limited (53, New Broad-street, London, E.C.), which is made from both meat and vegetables. The preparation is decidedly more palatable than simple meat extract, while its nutritive value is certainly not less. Karnoid, Limited (6 and 7, Stonecutter-street, Ludgate-circus, London, E.C.) exhibited the recently improved form of karnoid. It is a fact of no small importance and much in favour of this preparation that it is prepared without resource to chemicals or preservatives and yet contains the nourishing constituents of meat unaltered, amongst which, of course, is the myosin albumin. Messrs. G. van Abbot and Sons (Baden-place, Crosby-row, Borough, London, S.E.) showed a useful assortment of foods suitable for the use of diabetic patients, dyspeptics, and invalids. Maggi's consommé, tonic bouillon, soups, and essences are well known not only for their excellent flavour but also for their nutritive value, as shown by some analyses which we have made. These preparations were exhibited by Messrs. Cosenza and Co. (95, Wigmore-street, Cavendish-square, London, W.). A novel preparation is "maltova" (Maltova, Limited, Leeds and London), a combination of active malt extract with raw eggs. The genuineness of the preparation, as we have already pointed out, is shown by (1) that it readily converts starch emulsion into soluble starch and finally maltose; (2) that it turns nearly solid on heating, this being due to the coagulation of egg albumin; and (3) that it contains phosphorus and sulphur in organic association. A similar preparation, in which the egg is first dried by a special method and its nutritive constituents thus concentrated, is the condensed egg syrup of the Condensed Egg Syndicate (85, Tooley-street, London, S.E.). Preparations are made containing either the yelk or white of egg or both. Again, dried eggs themselves without any addition are prepared and there is also a combination of the nutritive elements of fresh eggs with active malt extract which is known as "ovumalt." Messrs. Callard and Co. (65, Regent-street, London, W.) exhibited several new foods adapted for patients suffering from diabetes or obesity. In addition to special breads and biscuits they prepare also sugarless marmalade, chocolate, and jellies. The patent groats and barley of Messrs. Keen, Robinson, and Co. (Garlick-hill, London, E.C.) have been before the medical profession for a great number of years as a well-known source of food for infants and invalids when used in the form of barley-water. The British Somatose Co. (165, Queen Victoria-street, London, E.C.) exhibited their somatose preparations, the basis of which is albumose. Clinical trial has shown somatose to be a true meat nutrient. A great assortment of meat preparations were exhibited by the Liebig's Extract of Meat Co., Limited (4, Lloyd's-avenue, London, E.C.), and a similar series of preparations was shown by Bovril, Limited (152 to 166, Old-street, City-road, London, E.C.). Malted foods were well represented in the exhibit of the Hovis Bread Flour Co. (Macclesfield), a feature of the exhibit being the Hovis food for infants and invalids, upon which we have analytically reported in our columns. Quite recently also we have referred to Moseley's food (Moseley's, Limited, Stockport) which is essentially a cereal food rendered more soluble and digestible by a special method of treatment. Cerebos salt (Cerebos, Limited, Newcastle-on-Tyne) marks a distinct advance on the old table salt; it is beautifully fine and white and, owing to the addition of phosphates, does not cake or become wet. Plasmon is now universally known to the profession and is recognised as a powerful food which is rapidly assimilated and therefore of particular value in wasting diseases. Specimens were shown of the pure proteid and of its combination with beef, cocoa, and arrowroot by International Plasmon, Limited (56, Duke-street, Grosvenor-square, London, W.). To many persons "Hipi" recommends itself, being an extract of mutton of decidedly nutritive value, while it is palatable to the taste. Lozenges containing mutton extract, suitable for use when ordinary food cannot be obtained, were also a feature of this exhibit (G. Nelson, Dale, and Co., 14, Dowgate-hill, London, E.C.).

As we have already stated, the display of drugs was on a decidedly smaller scale than in previous years, although there were some new preparations well worth bringing to the notice of the medical profession. Amongst these should be mentioned "antiphlogistine" of the Denver Chemical Manufacturing Co. (110, Cheapside, London, E.C.). Antiphlogistine is an advance on the old-fashioned cataplasm and consists of a uniform paste with an agreeable smell due to well-known antiseptics. The basis is a pure silicate. Spread over the tissues antiphlogistine keeps them agreeably moist and has a decidedly sedative effect. Ovolecithine is the pure distearo-glycerophosphate of choline prepared from the yelk of egg which has been used with advantage in those neuroses which indicate exhaustion of the nervous system. This interesting phosphorous substance may be had in the form of pills, confection, or injection which are supplied by Billon's Ovolecithine Co. (16, Water-lane, Great Tower-street, London, E.C.). Messrs. Bengué and Co. (Paris and 35, Alfred-place, London, W.C.) exhibited specimens of "narcotile," the bichloride of methylethylene, together with an apparatus for its administration. On the same stall specimens of "anæstile," a mixture of ethyl and methyl chloride, were shown and also a number of appliances for administering anæsthetics. Mr. W. Martindale (10, New Cavendish-street, London,

W.), had a profuse assortment of medical apparatus, besides a number of pharmaceutical preparations. Messrs. Cooper and Co. (80, Gloucester-road, South Kensington) included in their tastefully arranged exhibit their oxy-carbonated mineral waters and a number of beef preparations distinguished by the term "globena." The exhibit also included some special pharmaceutical preparations. The Salt Union Limited, through their agents Weston and Westall, Limited (41, Eastcheap, London, E.C.), exhibited samples of Droitwich brine crystals which are specially well adapted for the preparation of brine baths. They also showed specimens of a new table salt known as "star salt" which is so prepared that it does not absorb moisture and form into lumps in the salt cellar. Messrs. Arthur and Co. (69, Berners-street, London, W.) exhibited a number of interesting pharmaceutical preparations amongst which was "bromaurum," a compound of gold, arsenic, and bromine that has been used with advantage in some cases of nervous diseases.

Next week we propose to give a brief description of some of the more important exhibits coming under the categories respectively of surgical and sanitary appliances, together with a few miscellaneous exhibits of interest to the profession.

(To be concluded.)

THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

ELECTION OF MEMBERS OF COUNCIL.

OF the three members of Council whose terms of office have expired Mr. A. Willett and Sir Frederick Treves, Bart., K.C.V.O., C.B., do not intend to offer themselves for re-election, but Mr. H. T. Butlin will apply once more. The only other candidates of whom we have heard are Mr. Clinton T. Dent and Mr. A. A. Bowlby, C.M.G. The nomination paper of any other candidate must be received at the College not later than Monday, June 8th. The election will be held on Thursday, July 2nd.

ANNUAL MEETING OF FELLOWS.

A meeting of the Fellows of the College will be held on Thursday, July 2nd, at 5.30 P.M. Any motion to be brought forward must be received by the secretary not later than June 11th. Unfortunately, no meeting of Fellows has been held for several years as a quorum has not been present. We hope that some motions of importance may be brought forward at the ensuing meeting so that a quorum may be obtained.

ASYLUM REPORTS.

Surrey County Asylum, Brookwood (Annual Report for 1902).—The average number of patients resident during the year was 1036, comprising 418 males and 618 females. The admissions during the year amounted to 336—viz., 157 males and 179 females. Of these 298 were first admissions. Mr. James E. Barton, the medical superintendent, states in his report that the type of insanity, especially among the female admissions, "showed no improvement as regards curability from that observed of late years." Only 30 per cent. of the admissions were deemed to possess a fair chance of recovery. More than 25 per cent. were over 50 years of age and 64 of the 336 admissions had suffered from previous attacks of insanity. 37 were epileptic and 15 were the subjects of general paralysis of the insane. Two female patients were admitted whilst pregnant and were safely delivered during the year, the children being subsequently removed by the friends. Congenital mental defect or a hereditary predisposition to insanity was found to exist in 32 per cent. of the admissions. The number of patients discharged as recovered during the year amounted to 91—viz., 47 males and 41 females, or 8·8 per cent. of the average number resident. The deaths during the year amounted to 93, or 8·9 per cent. as calculated on the same basis. Of the deaths five were due to pneumonia, six each were due to renal disease and general paralysis of the insane, eight to pulmonary tuberculosis, nine to cardiac disease, 10 to epilepsy, 11 to senile decay, 14 to organic brain disease, and the rest to other causes. "Of the 1070 patients remaining in the asylum at the end of the year," adds Mr. Barton, "hardly 5 per cent. were deemed curable. A great many were old and feeble." 127 were epileptic, 22 were sufferers from general paralysis, and 104 were idiot or imbecile. Although influenza was prevalent and caused at times considerable inconvenience when the nursing staff was attacked the general health throughout the year was good and the death-rate was below the average. Owing to the prevalence of small-pox and the occurrence of cases in neighbouring towns the asylum was closed to visitors from February to September and all the members of the staff who required it were revaccinated. There were only two serious casualties among the patients during the year, both being cases of fracture of bones due to accidental falls. Many alterations and additions were made to the buildings during the year. The Commissioners in Lunacy state in their report that the asylum continues to be maintained in excellent order, that the wards were very clean and comfortable, that the furniture and bedding were in good condition, that the patients were orderly and well behaved, and that the medical case books were well kept. The committee of management states in its report that the weekly charge of maintenance of the patients was 12*s.* per head. A new chapel for the patients was opened on Dec. 15th. A new reservoir capable of storing 750,000 gallons of water was nearly completed at the end of the year and has since been filled. The sum of £2600 was authorised to be spent in connexion with a central boiler house and the work was practically completed by the close of the year and within the expenditure authorised.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN 76 of the largest English towns 8662 births and 4307 deaths were registered during the week ending Saturday last, May 30th. The annual rate of mortality in these towns, which had been 15·9, 15·4, and 15·5 per 1000 in the three preceding weeks, declined again last week to 14·9 per 1000. In London the death-rate was 13·9 per 1000, while it averaged 15·3 per 1000 in the 75 other large towns. The lowest death-rates in these towns were 7·2 in Wallasey, 8·0 in Hornsey, 8·2 in Handsworth and in Kings Norton, 8·5 in Croydon, 9·1 in York, 9·9 in Tynemouth, and 10·1 in West Hartlepool; the highest rates were 19·8 in Liverpool, 19·9 in Sunderland, 20·3 in Huddersfield, 20·4 in Merthyr Tydfil, 21·0 in Rotherham, 22·1 in Rochdale, 23·0 in Manchester, 23·6 in Burnley, and 26·9 in Middlesbrough. The 4307 deaths in these towns last week included 434 which were referred to the principal infectious diseases, against 457, 428, and 461 in the three preceding weeks; of these 434 deaths 136 resulted from measles, 101 from whooping-cough, 65 from diarrhœa, 50 from diphtheria, 38 from scarlet fever, 25 from "fever" (principally enteric), and 19 from small-pox. No death from any of these diseases was recorded last week in Bournemouth, Northampton, Devonport, Kings Norton, Smethwick, Derby, Bootle, York, West Hartlepool, Tynemouth, or Newport (Mon.); while they caused the highest death-rates in Leyton, Hanley, Wolverhampton, West Bromwich, Coventry, Nottingham, Wigan, and Middlesborough. The greatest proportional mortality from measles occurred in Walthamstow, Wolverhampton, West Bromwich, Coventry, Nottingham, Wigan, Middlesbrough, and Swansea; from diphtheria in Southampton and in Hanley; from whooping-cough in St. Helens, Oldham, and Rochdale; and from diarrhœa in Wolverhampton and Warrington. The mortality from scarlet fever and from "fever" showed no marked excess in any of the large towns. Of the 19 fatal cases of small-pox registered in these towns last week four belonged to Liverpool, three to Leeds, two to Leicester, two to Manchester, two to Hull, and one each to London, Willesden, Oldham, Burnley, Bradford, and Newcastle-on-Tyne. The number of small-pox cases under treatment in the Metropolitan Asylums hospitals, which had been 60, 60, and 64 on the three preceding Saturdays, had declined again to 60 on Saturday last, May 30th; 10 new cases were admitted during the week, against 17, seven, and 19 in the three preceding weeks. The number of scarlet fever patients under treatment in these hospitals and in the London Fever Hospital at the end of the week was 1771, against 1730, 1756, and 1759 at the end of the three preceding Saturdays; 225

new cases were admitted during the week, against 229, 236, and 234 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had been 260, 225, and 182 in the three preceding weeks, rose again last week to 186, but were 51 below the number in the corresponding period of last year. The causes of 52, or 1·2 per cent., of the deaths in the 76 large towns last week were not certified either by a registered medical practitioner or by a coroner. The causes of all the deaths were duly certified in Bristol, Salford, Bradford, Hull, and Newcastle-on-Tyne, while the largest proportions of uncertified deaths were registered in Birmingham, Smethwick, Leicester, Liverpool, and Warrington.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in eight of the principal Scotch towns, which had been 17·9, 18·0, and 17·2 per 1000 in the three preceding weeks, rose again to 18·4 per 1000 during the week ending May 30th, and was 3·5 per 1000 in excess of the mean rate during the same period in the 76 large English towns. The rates in the eight Scotch towns ranged from 10·8 in Perth and 16·8 in Aberdeen to 19·7 in Edinburgh and 22·0 in Dundee. The 601 deaths in these towns included 28 which were referred to whooping-cough, 18 to diarrhœa, seven to measles, six to scarlet fever, six to enteric fever, and five to diphtheria, but not one to small-pox. In all, 70 deaths resulted from these principal infectious diseases last week, against 57, 68, and 51 in the three preceding weeks. These 70 deaths were equal to an annual rate of 2·1 per 1000, which was 0·6 per 1000 above the mean rate last week from the same diseases in the 76 large English towns. The fatal cases of whooping-cough, which had been 26, 25, and 22 in the three preceding weeks, rose again last week to 28, of which 16 were registered in Glasgow, six in Edinburgh, three in Greenock, and two in Leith. The deaths from diarrhœa, which had been 11, 12, and 16 in the three preceding weeks, further rose to 18 last week, and included nine in Glasgow, four in Dundee, two in Aberdeen, and two in Paisley. The fatal cases of measles, which had been eight, 16, and six in the three preceding weeks, rose again last week to seven, of which six occurred in Glasgow. The deaths from scarlet fever, which had been four, four, and one in the three preceding weeks, increased to six last week, and included three in Edinburgh and two in Glasgow. The fatal cases of "fever," which had been three, five, and three in the three preceding weeks, rose again last week to six, of which two were registered in Glasgow and two in Paisley. The deaths from diphtheria, which had been five, six, and three in the three preceding weeks, rose again to five last week, and included three in Glasgow and two in Edinburgh. The deaths referred to diseases of the respiratory organs in these towns, which had been 104, 101, and 102 in the three preceding weeks, further rose last week to 114, but were slightly below the number in the corresponding period of last year. The causes of 22, or nearly 4 per cent., of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 25·3, 22·3, and 22·4 per 1000 in the three preceding weeks, declined again to 22·2 per 1000 during the week ending May 30th. During the past four weeks the death-rate has averaged 23·1 per 1000, the rates during the same period being 14·7 in London and 17·5 in Edinburgh. The 161 deaths of persons belonging to Dublin registered during the week under notice showed a decline of two from the number in the preceding week and included seven which were referred to the principal infectious diseases, against 15, 15, and 11 in the three preceding weeks; of these three resulted from diarrhœa, two from whooping-cough, one from scarlet fever, and one from "fever," but not one from small-pox, from measles, or from diphtheria. These 7 deaths were equal to an annual rate of 1·0 per 1000, the death-rates last week from the same diseases being 1·4 in London and 2·1 in Edinburgh. The deaths from diarrhœa, which had been one and two in the two preceding weeks, further rose last week to three. The fatal cases of whooping-cough, which had been four, three, and one in the three preceding weeks, rose again to two last week. The 161 deaths in Dublin last week included 28 of children under one year of age and 37 of persons aged 60 years and upwards; the deaths of infants slightly exceeded the number in the preceding week, while those of elderly persons showed a decline. 10 inquest cases and eight deaths from violence were registered, and 64, or almost 40 per cent., of the deaths occurred in public institutions. The causes of six, or nearly 4 per cent., of the deaths registered in Dublin last week were not certified.

THE SERVICES.

ROYAL NAVY MEDICAL SERVICE.

THE following appointments are notified:—Staff Surgeons: E. A. Penfold to the *Britannia* for the *Aurora*, and H. Meikle to the *Leviathan*. Surgeons: L. Lindop to the *Leviathan*; A. McCloy to the *Hawke*; J. O'Hea to the *Ariadne* for the *Columbine*; M. J. Laffan to the *Minerva*; and E. R. L. Thomas to the *Viriđ* for disposal.

INDIAN MEDICAL SERVICE.

The King has approved of the following promotion:—*Bombay Establishment:* Lieutenant-Colonel to be Colonel: John Philip Greany. Dated Jan. 11th, 1903. The King has also approved of the retirement from the service of the undermentioned officers:—Lieutenant-Colonel William Owen (dated March 24th, 1903) and Lieutenant-Colonel John Wilkins Clarkson (dated March 31st, 1903).

PAY OF THE ROYAL ARMY MEDICAL CORPS IN INDIA.

In reply to Dr. Thompson, Lord George Hamilton in the House of Commons on May 28th, stated that the Royal Warrant of March 24th, 1902, amended certain articles of the pay warrant and was therefore subject to the last clause in the preamble of the pay warrant which declares that it is not in force in the Indian Empire. The question of the pay of the Royal Army Medical Corps in India had, however, been under consideration and revised rates, giving a substantial increase to the ranks of lieutenant, captain, and lieutenant-colonel, had been sanctioned with effect from Nov. 24th, 1902.

THE ROYAL ARMY MEDICAL CORPS.

We understand that the journal of the Royal Army Medical Corps, which has been incubating for some time, is about to make its appearance. Some difficulty has been experienced in obtaining an editor, but Major R. H. Firth, R.A.M.C., has now volunteered to undertake the post and the first monthly number will in all probability be published on July 1st. It will deal not only with purely professional matters but with all questions concerning the medical services of the army and the auxiliary forces. We wish the new venture every success.

On May 29th, at Buckingham Palace, when Her Majesty presented badges to the nurses of Queen Alexandra's Royal Nursing Service, Inspector-General Sir Henry F. Norbury, K.C.B., Director-General of the Naval Medical Department, and Staff Surgeon W. J. Colborne, assistant to the director-general, had the honour of being presented to Her Majesty.

Correspondence.

"Audi alteram partem."

HOSPITAL SUNDAY.

To the Editors of THE LANCET.

SIRS,—The King and Queen have graciously intimated their intention of attending the afternoon service at St. Paul's Cathedral next Sunday, June 7th, when the Hospital Sunday collections will be taken—as their Majesties are unable to be present on June 14th, the day fixed for Hospital Sunday.

Last year Hospital Sunday produced the record amount of £62,669, and, as the collections in places of worship were increased by £10,000, it seems certainly not hopeless to expect to raise the desired sum of £100,000 on this especially memorable occasion.

Mr. George Herring has again most generously offered to give one-fourth to the amount collected in places of worship (up to a gift of £25,000).

The hospitals are just now in great need of help. The money collected is distributed by the Fund within a few

weeks, and is given to the maintenance of the wants of the institutions and not for building purposes.

There are over 100,000 patients in the wards of the hospitals at this moment, and it is estimated that quite 25,000 of these are sent from the country districts. This, it seems to me, constitutes a great claim on residents outside the metropolitan area to help to bear the cost of the care and provision so willingly extended by the London hospitals to provincial and suburban sufferers.

I especially desire to press upon those who, while they are not attached to any place of worship, are yet well-wishers of the hospitals, that they may send to me, at the Mansion House, any donation which they may think fit to give for addition to the collection at St. Paul's Cathedral on Sunday afternoon.

I am, Sirs, yours faithfully,
MARCUS SAMUEL, Lord Mayor.
The Mansion House, London, E.C., June 3rd, 1903.

A PRESYSTOLIC MURMUR IN THE DILATED HEARTS OF CHILDREN.

To the Editors of THE LANCET.

SIRS,—There is one point of secondary importance in the paper of Dr. George Carpenter on Uncomplicated Myocarditis in Children upon which I should like to make a brief remark. That point is the occurrence of a presystolic murmur without mitral stenosis. Dr. Carpenter explains the occurrence of such a murmur by attributing it to "comparative narrowing" of the mitral orifice. Some years ago, when my attention had been drawn to the existence of the presystolic murmur without mitral stenosis, besides those met with by myself, I discovered several other cases of this character in the clinical and post-mortem records of Guy's Hospital. Although in some of these cases the left ventricle was dilated while the mitral orifice remained of normal size, in others the dilatation of the mitral orifice was so great that a "comparative narrowing" could not have been the explanation of the existence of a presystolic murmur during life. While, however, it seems to me that a comparative narrowing of the mitral orifice will not explain the occurrence of a presystolic murmur without mitral stenosis it must be admitted that it is not evident that any other theory that has been advanced to account for it is satisfactory. My own feeling is that the murmur is what we may call a very prolonged "third sound" of the heart and that when we are quite clear as to the explanation of the shorter forms of the "third cardiac sound" we shall understand better the causation of anomalous presystolic murmurs.

This opportunity may be taken of referring to one other point. Dr. Carpenter has done me the honour of giving me the credit of having first noticed that a presystolic murmur may be met with in association with general adhesion of the pericardium in children uncomplicated with mitral stenosis. In one sense, perhaps, Dr. Carpenter is correct. I noticed how quickly such a murmur may develop after pericarditis, far too soon for contraction of the mitral orifice to have taken place, and was able to verify the supposition of the non-existence of mitral stenosis by one or two necropsies and by examination of post-mortem records. My first note upon the point was published in April, 1894,[1] and, curiously enough, in the same month Dr. Graham Steell[2] published two cases where general adhesion was found to be present but the mitral orifice was not constricted in which presystolic murmurs had been heard during life. Dr. Steell and myself may therefore be said to have simultaneously noticed the same unusual occurrence of the presystolic murmur.

It should also be mentioned that Dr. Octavius Sturges, in his Lumleian lectures on Heart Inflammation in Children delivered a few weeks before the notes by Dr. Steell and myself appeared in print, speaks of "at least nine (probably 11)" cases where presystolic murmurs had been present during life which "post mortem exhibited no stenosis whatever." Dr. Sturges lays stress upon the importance of general adhesion of the pericardium in children and no doubt in most, if not all, of these nine cases such adhesion was present. One does not wish to lay undue stress upon the connexion of general adhesion of the pericardium with anomalous presystolic murmurs. The nature of the connexion is probably as follows. A presystolic murmur without mitral stenosis or aortic valvular disease is more likely to occur in association with dilatation of the heart in a child or young subject than in a fully developed adult, and in most fatal cases of cardiac dilatation under the age of 20 years general adhesion of the pericardium proves to be present.

I am, Sirs, yours faithfully,
Clifton, Bristol, May 30th, 1903. THEODORE FISHER.

[1] Brit. Med. Jour., vol. i., 1894, p. 906.
[2] Practitioner, April, 1894.

THE INFECTED BLANKETS.

To the Editors of THE LANCET.

SIRS,—The sale of typhoid-fever infected blankets has naturally created considerable alarm which may do good by directing professional and public attention to the existence amongst us of institutions which store and sell clothes not alone infected with typhoid fever but many other infectious diseases—viz., our pawn offices and second-hand clothes shops. I drew special attention to this source of the spread of infection—a very common one, in my opinion—so long ago as the Liverpool Congress of the Sanitary Institute in 1894. Anyone familiar with the habits of the poorer classes will appreciate how frequently when they are sick they put their spare clothes on their beds. As their slender resources are soon exhausted these clothes are pawned and invariably accepted without any inquiry on the part of the trader as to any possibility of their being infected. They are then stored in close contact with other, possibly non-infected, goods, so increasing the possibility of further spread of infection by the latter. The law that it is punishable to pawn or sell infected clothes is neither known nor, I am afraid, would be respected by the poor under the pressure of want. How to deal with this involves great practical difficulties. To insist that the pawnbroker and second-hand salesman should make inquiries from all their customers would, I am afraid, lead to little good, as the probability of their doing so and receiving an accurate reply is remote. The erection in each office of a small disinfector would be leaving the disinfection in careless and incompetent hands, so the duty must sooner or later be undertaken by the sanitary authorities. Arrangements might be made to disinfect the contents of each office once a week. This, no doubt, would involve considerable labour and expense, but it would get this source of the spread of disease under control.

I am, Sirs, yours faithfully,
ANTONY ROCHE, M.R.C.P. Irel.,
Professor of Public Health, Catholic University
Dublin, May 30th, 1903. Medical School, Dublin.

PERITOMY.

To the Editors of THE LANCET.

SIRS,—I have read Mr. Simeon Snell's paper in THE LANCET of May 30th, p. 1515, with very great interest, as I am inclined to think that the operation of peritomy is too little resorted to. In the *Indian Medical Gazette* for January, 1897, I gave my experience of this little operation for the treatment of those cases of trachomatous pannus in which milder means (including thorough treatment of the lids) had failed.

Mr. Snell considers that peritomy has "rightly fallen into disuse" for this class of cases, on the ground that "by treating the eyelids, the pannus will clear up ....." This may be true of the mild and early caught cases of English practice, but it certainly does not hold in my experience of Indian work. In Madras granular ophthalmia is very common and very much neglected by the sufferers. The result is that one meets with a large number of severe cases in which the corneal complications threaten the safety of the eye. In a very considerable percentage of such cases the cornea clears up *to a certain extent only*; especially is this so when entropion and trichiasis have been long neglected.

In a recent tour through Europe to visit a number of the principal eye hospitals I made a special point of asking the experience of continental surgeons on this point and in those countries where trachoma is common and disposed to be neglected I found several well-known ophthalmologists who spoke highly of the value of peritomy in the class of cases which I have indicated. Needless to say, I nowhere met anything like the evidence of neglect of lid and corneal complications with which India has made me so familiar. Even Italy, Russia, and Sweden presented no such picture.

I have performed peritomy for trachomatous pannus in considerably over 50 cases and have never failed to find it useful; on the other hand, I have never seen any bad results

from the operation. I graduate the width of the strip to be removed according to the severity of the signs present (rarely exceeding six millimetres) and I make a point of removing all the subconjunctival tissue right down to the sclerotic and of dissecting up the flap as close to the cornea as possible. When only a small patch of pannus remains at one point I do a partial peritomy there. Should the result of the first operation not be as complete as one could wish, the circumcorneal tissue may be carefully destroyed at a subsequent sitting with the actual cautery. When a few large feeder-vessels can be distinctly traced into the still persisting area of vascularisation, I prefer gently to pick these out with the cautery for a few millimetres along the length of each. I never find chloroform necessary except in nervous children.

I am, Sirs, yours faithfully,

R. H. ELLIOT, M.B., B.S. Lond., F.R.C.S. Eng.,
Captain I.M.S.

Edinburgh, May 31st, 1903.

THE RETARDED PULSE WAVE IN AORTIC REGURGITATION.

To the Editors of THE LANCET.

SIRS,—If some physiologist of repute will assure me, either through your pages or in private, that the tracings published by Dr. Walter Broadbent in THE LANCET of May 23rd, p. 1443, represent anything definite I may then congratulate him on having come to the conclusion that the pulse in aortic regurgitation is not "always retarded or delayed"—a distinct statement made by Sir William Broadbent from which he cannot extricate himself. I am afraid that my critics do not realise that the tracings I have given are of a totally different standing; they will pass muster in any first-rate physiological laboratory and they are in themselves the clear evidence of what goes on. Not so my comments upon them. But as to the question asked by Dr. Broadbent at the conclusion of his communication, I might be permitted to call his attention to the explanation which I have given[1] of the slowness of propagation of the wave in aortic regurgitation compared with the high velocity of the wave created by *impact* when the valves are intact.

I am, Sirs, yours faithfully,

PAUL M. CHAPMAN, M.D., F.R.C.P. Lond.,
Physician, Herefordshire General Hospital.

May 23rd, 1903.

THE ROYAL COLLEGE OF SURGEONS IN IRELAND.

To the Editors of THE LANCET.

SIRS,—In my letter which you published in THE LANCET of May 9th, p. 1328, I inadvertently stated that I paid £10 10*s.* for the primary certificate of Fellowship which purported to grant exemption from the subjects of the Primary Fellowship Examination; this should have been £15 15*s.* Also, the number of successful Fellowship candidates should have been 51 out of 52 persons who presented themselves at four successive examinations. In answer to Dr. G. Fleming of Ombersley, whose comments on my letter appeared in THE LANCET of May 23rd, p. 1477, I have to state that the Executive Committee of the General Medical Council did me the courtesy of considering and placing my report of the illegal examination on their printed minutes and transmitted a copy of the same to the President, Vice-President, and Council of the College "for their information." In a letter dated May 26th, 1903, the Registrar of the General Medical Council informs me "that the Council had reason to believe that a minute on the subject was sent by the Royal College of Surgeons in Ireland to the Privy Council." It is evident, therefore, that the Privy Council for Ireland, to whom I also reported the matter, has not been negligent.

Although Section XXVI. of the Medical Act, 1858, gives the General Medical Council the power of erasing higher qualifications from the Medical Register, further action on the part of the Council it would be unreasonable to expect, for it must be recollected that although the Irish College of Surgeons has only one accredited representative on the General Medical Council, Sir Charles Ball, it has in reality three members of the body corporate to espouse its interests, for the representative of the University of Dublin and the Direct Representative for Ireland are also members of the Council of the Royal College of Surgeons in Ireland. This circumstance, indeed, may be taken as a plea against Direct Representatives being members of the governing bodies of universities or colleges, as dual interests are obviously against impartial representation of the already too feebly represented general practitioner.

Referring to the refusal of the College of Surgeons to give a Licentiate a copy of the College by-laws, may I now place on record my sense of the untenable position the College is now placed in should it have reason to criticise the professional deportment of a Licentiate to whom it so openly refused their by-laws by "the advice of their solicitor?" Indeed, its criticism of any Licentiate's conduct now could hardly have other than ludicrous effect, considering the unfortunate manner in which they themselves are shown to have neglected their own charter responsibilities. The Royal College of Surgeons in Ireland has now been given ample opportunities of refuting any false statements I have made. Its irregular higher examinations I have shown up in the face of great opposition. In silence it has accepted the only verdict that can now occur to your readers. In concluding, therefore, this correspondence I take the opportunity of returning you my heartiest thanks for so kindly placing your columns at my disposal and I recognise in such editorial courtesy a continuity of that same public spirit which actuated the great Wakley, where abuses were to be corrected or grievances were to be redressed.

I am, Sirs, yours faithfully,

May 30th, 1903. S. WESLEY WILSON.

ACUTE AMAUROSIS FOLLOWING INFANTILE CONVULSIONS.

To the Editors of THE LANCET.

SIRS,—In THE LANCET of May 23rd, p. 1476, Dr. George Carpenter was good enough to comment upon some of the points raised by us in our paper under the above title.[1] Will you allow us to make one or two remarks in answer to his criticisms? In our paper we brought forward facts to show that a temporary amaurosis sometimes follows severe attacks of infantile convulsions and we sought to distinguish this group from the better known group of cases of amaurosis which follows an attack of posterior basal meningitis. In the former or post-eclamptic group we suggested that the blindness was due to a discharge from the visual centres followed by a condition of anæsthesia.

We need hardly say that we are conscious of the difficulties attending the diagnosis of the cause of the attacks of infantile convulsions in many instances and also that meningitis or a local encephalitis may be easily overlooked during infancy, especially in its initial stages. But putting doubtful cases on one side and taking the typical cases to which we called attention and which came under our own observation we cannot agree with Dr. Carpenter if he thinks that these were in reality cases of meningitis. Infants commencing with meningitis may or may not have convulsions, but no one can pretend that meningitis is a common cause of convulsions; indeed, the whole history of eclampsia and epilepsy disproves this. Surely because a neurotic infant has a feverish attack and severe convulsions ending in recovery we are not justified on such symptoms alone in diagnosing meningitis, even though the attack may have been followed by a fleeting amaurosis. Certainly, as a rule, if meningitis commences with convulsions the more characteristic symptoms of cerebral disease follow; they do not begin and end with fever, convulsions, coma, and recovery.

The pathology of the temporary blindness, hemiopia, aphasia, or paresis which sometimes follows convulsions or epileptic attacks is far from certain; there may be punctiform hæmorrhages, toxin poisoning, or, as we suggested as a cause for the amaurosis, a condition of exhaustion following discharge. That the more lasting hemiplegias or other paralyses which are associated at times with convulsions or whooping-cough, either one or both, are due to a meningeal hæmorrhage resulting from the stress and strain consequent on the convulsions and respiratory spasm is, we think, very probable and it is quite possible that the temporary loss of function which takes place may be due to a similar cause. With regard to another point raised as to the condition of the pupils and their reaction to light, our own experience is that

[1] THE LANCET, March 28th, 1903, p. 869.

[1] THE LANCET, May 9th, p. 1284.

in the early stages of amaurosis following undoubted cases of post-basal meningitis in infants the pupils are dilated and sluggish or do not react at all; later, as sight returns, the pupils react normally. This, however, does not seem to agree with the observations of some others. In our own cases of post-eclamptic amaurosis the pupils were active from the first.

We are, Sirs, yours faithfully,

HENRY ASHBY,
SYDNEY STEPHENSON.

June 1st, 1903.

"OPTICIANS" AND SPECTACLE PRESCRIBING.

To the Editors of THE LANCET.

SIRS,—I have read with interest your leading article under the above heading in THE LANCET of May 9th, p. 1312. The sight-testing scheme of the Worshipful Company of Spectacle Makers is so much in the air at present that I do not propose to discuss it, but I do ask you to allow me to say a few words on behalf of the optician, as some of your statements are liable to misinterpretation. I do not for a moment wish to belittle the work of the ophthalmic surgeons of the present day, but that those of former years were not above giving the optician his due there is clear evidence.

You say that before the days of Brewster there was no common knowledge of the function of accommodation and you credit Young with the discovery of astigmatism. Young claims the discovery of the function of accommodation also. As a matter of fact, he did not discover either of these things; he simply quoted what was common knowledge at the time. Young, who was then a student, aged 20 years, read a paper before the Philosophical Society on May 30th, 1793, entitled "Observations on Vision," in which he announced that he had discovered the muscularity of the crystalline lens. This so-called discovery was also claimed by the celebrated John Hunter, whose lectures Young was attending at the time. Young does not appear to have been imbued with the courage of the average discoverer, however, for he shortly afterwards abandoned the idea in a lecture at Göttingen, only to take it up again at a later period.

I discredit Young's discovery because on turning to an "Essay on Vision" by George Adams, the optician of Fleet-street, printed and published in 1792 (the year before Young's lecture), I find that Adams had a very clear notion of the function of accommodation and his reasonings are so good that they are quoted by leading oculists for many years after, such as Dr. Kitchener in 1826, Dr. Middlemore in 1835, and Dr. John Stevenson, oculist to the King, in 1834, who in his book, "Weakness of the Sight," advises his fellow practitioners to read the essay of George Adams the optician. To go back further still, Emerson the mathematician in his "Elements of Optics," published in 1768, says: "Tho' men may see distinctly at different distances by *altering* the *position* and *figure* of the *crystalline*, yet they can only see distinctly within certain limits and nearer than that objects appear confused."

As late as 1846, in a "Treatise on the Eye," Dr. W. C. Wallace speaks of accommodation being caused by the external muscles, advises people to defer wearing glasses as long as possible, and recommends medicine as a substitute for spectacles, and to this work there is a recommendatory notice by Sir David Brewster. Contrast this with the clear statement of Coddington who certainly was not a medical man. In an "Elementary Treatise on Optics" dated 1825 he says: "By means of a certain muscular mechanism which increases or diminishes at pleasure the convexity of the crystalline the form of the eye is modified so as to throw on the retina distinct images of all objects between very wide limits."

The reluctance of the medical profession to adopt the correct theory of accommodation by alteration of the crystalline is further shown by Dr. F. H. Butt who in 1847 still sticks to the notion of contraction of the pupil. I think this disposes of Young's discovery of the theory of accommodation, and I am afraid that he cannot in the face of his own statement be given much credit for originality in regard to astigmatism, for the following is a quotation from his miscellaneous works edited by George Peacock, M.D. After describing the effect of the difference of focus in the two meridians of the eye, he says: "On mentioning this circumstance to Mr. Cary the optician he informed me that he had *frequently taken notice* of a similar circumstance; that many persons were obliged to hold a concave glass obliquely in order to see with distinctness, counterbalancing the too great refractive power of the eye in the direction of that inclination and finding but little assistance from spectacles of the same focal length." It is tolerably clear from this that Cary the optician knew as much about astigmatism as Young did, particularly when the latter goes on to say, "The difference is *not in the cornea*, for it exists when the effects of the cornea are removed by immersing the eyes in water."

Then for the final discovery of the method of adapting cylindrical lenses to correct astigmatism, probably one of the most beneficial inventions of the nineteenth century, we have to thank Professor Airy, not a member of the medical profession, and even after this discovery it was not customary among oculists to prescribe cylindrical lenses until Andrew Ross, Dixey, and other opticians had become expert in making the lenses and correcting the defect. No suggestion ever appears to have been made by a medical man as to how the defect should be corrected; the very name was given to it by a parson, the Rev. Dr. Whewell.

That the opticians frequently had to correct the oculists' prescriptions in those days is shown by the fact that Dr. Harrison Curtis in his work on "Diseases of the Eye" published in 1833, has to chide his fellow physicians for prescribing amber lenses, quoting Peter Dollond the optician as his authority that they were injurious. I could carry these quotations on indefinitely, but think I have given sufficient to prove that the optician had a fair claim to knowledge in the old days and it is certain that the study and practice which are necessary to pass the examinations of the optical bodies of the present day will not tend to lessen either his knowledge or general intelligence and the time is not far distant when ophthalmic surgeons will recognise that the opticians are their best friends, because the knowledge that they are acquiring will enable them to recognise disease in cases which now only come under the surgeon's notice when too far gone to remedy.

I am, Sirs, yours faithfully,

JAMES AITCHISON.

May 25th, 1903.

To the Editors of THE LANCET.

SIRS,—I believe it to be contrary to your usual custom to publish in your columns a letter from a non-medical correspondent, but I trust that an exception will be made with this which refers to the leading article that appeared in your issue of May 9th, p. 1312, entitled "'Opticians' and Spectacle Prescribing." My letter, if published, may possibly tend to have some effect towards clearing a somewhat cloudy atmosphere and I am sure that the opticians who possess the diploma of the Worshipful Company of Spectacle Makers have an earnest desire to work in harmony with the medical profession.

All discoveries in optics have been made by opticians—whether medical men also or not is beside the question—and although discovery by one does not confer a privilege on another, yet if it did the application of lenses so as to alter the course of light which enters the human eye, would pertain to the optician, medical or other, and certainly not, I submit, to the physician *per se* who, indeed, may not be an optician at all. The adaptation of glasses for visual errors, being neither surgery nor medicine, has always been the work of non-medical opticians and so long as exact knowledge in matters optical was rare there seems to have been no opposition to it on the part of the medical profession. The question really at issue is simply whether it is better that spectacles should be sold by those who have a knowledge of optics or by those who have not.

That there has been an enormous increase in the number of glasses used within late years is an undoubted fact, this being due to increased knowledge and better procedure on the part of those who supply glasses to the public. I do not think that anyone will maintain that such increase in the use of glasses is not for the material benefit of the people at large. And the more the use of spectacles is appreciated by the public the greater the number of those who consult the oculist. Moreover, while the dealer who sells spectacles as he would pounds of sugar will supply them to all and everyone he who understands his work will at once recognise those cases which lie outside his province and refuse then to supply glasses except under the prescription of the oculist. I do not think that I exaggerate in saying that the optically educated optician will refer a dozen cases to the medical man while the optically uneducated optician will refer one.

And it must be obvious that it is impossible for the spectacle-vendor to know whether there be a diminished visual acuity or symptoms suggestive of serious muscular trouble or of disease or that the application of a mydriatic seems desirable, or that the condition seems complicated, unless he does follow a proper routine when a customer comes to him for optical aid.

Your article admits that "in the great majority of cases reading spectacles can be safely and well supplied by rule of thumb without further examination than can be accomplished by any of the ordinary forms of optometer" Since this is admitted, then surely must be the adaptation of distance glasses, for whatever may be the error of refraction in near vision such must also exist in distant vision; emmetropia being an exceptional condition, of course the emmetropic presbyope is a rarity and even he would, later on, become ametropic. The optician who does not test sight cannot know to what cases he may safely supply glasses and to what cases he should not; again, if he is able to discriminate by proper testing between the two, then surely he must be in a position to supply the correction where there is no indication of any trouble beyond that of uncomplicated erroneous refraction. You say that in consulting a medical man there is an "insurance against the existence of any actual or incipient disease which the spectacle-seller would be liable to overlook." This is indeed a fact, and it emphasises the great necessity for the education and certification of the refractionist in the work in which he is daily engaged.

Technically educated opticians now begin to recognise their own sphere and that of the medical man and this obtains to an extent already out of proportion to what was the case before the Spectacle Makers' Company's scheme came into existence. The difference in this respect between those opticians who have and those who have not yet associated themselves with the Spectacle Makers' Company is very marked. The principal point at issue in the optical world at this moment is whether the Spectacle Makers' Company shall crown their efforts for safeguarding the public and regulating the status of the optical industry by adding to their present examination one which includes spectacle-fitting or sight-testing. This suggestion, I venture to submit, ought to receive the highest encouragement from the medical profession as a step in the right direction for the benefit of all concerned—the public, the trade, and the profession itself. The present examination of the company only covers the subject of applied optics up to a stage which is short of the adaptation of glasses, while at the same time fully 90 per cent. of the diploma holders are daily engaged in this work. It is work needed by the public and was a prerogative of the industry, indeed, for centuries before the company undertook their modern system of examination. It must, then, be only right in the interests of everyone that the diplomates of the company should show by the ordeal of a proper examination that they possess the necessary information—not only an acquaintance with what they may and should do for the correction of optical visual defects but an acquaintance equally with the corresponding limitations, a sufficient knowledge of those circumstances under which medical treatment or the advice of an oculist may be necessary.

I am, Sirs, yours faithfully,

May 18th, 1903. LIONEL LAURANCE.

NOTES FROM INDIA.

(FROM OUR SPECIAL CORRESPONDENT.)

The Plague Epidemic.—The Loss of Life from Wild Animals.

THE outbreak of plague for this season in India has passed its period of highest mortality and is now subsiding. In the Madras Presidency, which has never returned more than a few hundred deaths in a week, the mortality has sunk to 24, but in the Punjab, where the outbreak was the latest to develop, the deaths last week were 16,212. In the Bombay Presidency, where we have been accustomed to note thousands of deaths a week for a very long time past, the weekly record has sunk to 1242. In Bengal also the last return shows only 351 deaths and the recrudescence in Calcutta has nearly died out. Bombay city and Karachi are still suffering severely and 1160 deaths occurred last week in the United Provinces. The total mortality throughout India for last week was 20,264 as compared with 24,335 for the previous seven days and with 28,146 for the week before that. Taking the figures generally it is to be noticed that the outbreak has developed later in the season and has lasted longer into the hot weather. This, curiously, seems to be the feature of each recrudescence as compared with its predecessor. In Calcutta, however, so regular has been its incidence that the number of deaths for any particular week can almost be calculated beforehand. Another feature worth noting is the similarity in the number of deaths for each outbreak in certain places. Bombay city has had about 25,000 deaths each season, Calcutta about 10,000, but other places have varied considerably.

The Loss of Life from Wild Animals.

The destruction of life in certain parts of India by wild animals can only be emphasised by recording figures. In the Central Provinces alone 513 human beings were killed by wild beasts and 1304 by snakes during the past year. As a recent writer has endeavoured to minimise the work of the Pasteur Institute at Kasauli it may be worth mentioning that from this one district 56 people died from rabies after bites received from jackals. This danger exists over the greater part of India and the total mortality from rabies is probably considerable. The great mortality from snake-bite indicates the necessity of a more wide distribution of antivenene. The Jubbulpore district stands out as in particular danger from snakes. Over and above this destruction of human life something like 12,000 domestic animals were killed by snakes in the Central Provinces alone—a pecuniary loss which the sporting instincts of Europeans and the rewards for natives do not seem to prevent.

May 16th.

MANCHESTER.

(FROM OUR OWN CORRESPONDENT.)

Walk from Manchester to Southport.

THE example set by the recent walk from London to Brighton has soon been followed by a Manchester to Southport walk. Whether this is the result of emulation or merely an example of the imitative instinct existing in man and some of the lower animals it is scarcely worth while to inquire, but it is comforting to know that the art of walking is not to get lost. Many of us would also commend these walking contests as being harmless to the ordinary users of the King's highway. The main roads of the country, even in comparatively remote districts, are now so dangerous that timid or nervous people are afraid to venture on them. They have got accustomed to the comparatively innocent cyclist but they look with dread at the motor-cycle as it rapidly approaches with its tiresome knock, knock, knock—which, however, must be looked on as tending to safety—and with horror at the motor-car with its goggled, veiled, and dust-begrimed occupants, leaving their taint behind them as refreshment for those who have escaped destruction. Seriously, however, the roads are being made almost unusable by ordinary people either for walking, riding, or driving, for not only is the danger by no means imaginary as the daily papers show, but the dust nuisance is at times almost intolerable, and, of course, by no means innocent of danger. Possibly the selfish craze for immoderate speed on the ordinary high-roads may subside by-and-by either as the result of convictions for manslaughter or on more æsthetic grounds. In the meantime one turns with some satisfaction to the record made by 100 or 101 men who walked the 41½ miles on May 23rd between Manchester and Southport. The winner covered the distance in 7 hours 11 minutes 8 seconds, while the second man was only two seconds later, and the third man was not far behind. The others tailed off for nearly three hours, but the last got in just under 10 hours. Two sisters 18 or 20 years of age, living in Moss Side—from which district, curiously enough, the first and second of the men hailed—started on their own account rather earlier than the men and walked the whole distance and said that they were in no way exhausted by their 10 hours' continuous walking. It does not appear that there had been much special training among the competitors but most of them were fond of various forms of exercise. "There were solicitors, stockbrokers, accountants, medical men, chemists, bank clerks, warehousemen, a Walkden collier, a

Salford policeman, young men with smooth chins, business men well advanced in the forties, and a wrinkled veteran of the Indian mutiny." It speaks well for the endurance of the men that at the dinner in the evening they appeared very little the worse for their walk. The mayor of Southport presided and presented a silver cup, photographs, and a medal to the winner and medals to the second and third and promised mementos to the two young ladies who on their arrival in Southport were at once invited to the dinner. Within reasonable limits the resuscitation of walking as an exercise is desirable, but it seems as if in these days nothing is thought worth doing for its own sake but only in competition with others and for the sake of making a record. In one long-distance walk those engaged, who must be "amateurs"—a word now of somewhat doubtful meaning—"may be paced by cyclists." These contests seem to be springing up like mushrooms all over the country and as in most cases the competitors are accompanied by cycles and motor-cars there will be an accompaniment of noise, dust, and smell which some found sufficiently trying on this recent occasion. Some thought cramp in the thighs would have stopped them, others suffered from "stitch," and sore feet were not rare. The winner is said to be "a total abstainer and a non-smoker only when he is in training," the second being a total abstainer and non-smoker.

The Manchester Infirmary.

Some members of the infirmary board are spending the Whitsuntide holidays in visiting the most important hospitals in London, Scotland, and elsewhere. The knowledge which they thus obtain will help them considerably in the great work they have in hand.

Shell-fish and Sewage.

Looking at the expanse of the Duddon sands one would not associate them, without some evidence, with the indictment recently found against them. "Owing to the many cases of poisoning by eating shell-fish contaminated with sewage matter," the Millom urban district council had a number of mussels and cockles taken from the sands analysed. Dr. R. T. Hewlett, of King's College, London, examined 36 specimens and found them "swarming with bacteria" and said that the beds must be seriously polluted with sewage. The samples were got from three different places, one bed being "12½ feet under water at low water." This is without much doubt an illustration of the state of things all round our coasts. "It was decided to issue notices to the public warning them against eating this shell-fish." As long as our present mode of disposing of the sewage of seaside places is continued we shall have constant repetitions of the above story. It is the readiest and least troublesome method to turn the sewage right away into the sea, forgetting the penalty to follow in the sickness and loss of life entailed, in the injury to the local reputation sure to follow, and when the fact as to the danger of sewage poisoning is known the loss of a valuable food-supply and the consequent suffering and privation of the mussel-gatherers. The return of sewage to the land is the unattained, but surely not unattainable, end to be sought and, at all events, it is quite clear that sewage ought not to be so disposed of as to make the eating of a cockle, a mussel, or an oyster, or even the humble periwinkle, an operation to be performed at the risk of life.

The Dangers of Electricity.

About three o'clock in the morning, fortunately, of May 24th a serious explosion took place in Manchester, wrecking the basement of one warehouse and followed by a fire in the cellar of another next door. It was found that there had been a fusion of electric wires, but whether in these premises or in the street cables does not seem to be certain. Before a proper inspection could be made an explosion "shattered the doors, windows, railings, woodwork, and glass" in one basement and "fragments of timber were hurled across the street with sufficient force to break in a door on the opposite side of the road. Three large stone steps about two yards long and weighing five or six hundredweight each were shifted about three yards and piled one above the other," while other damage was also done. "The cause of the explosion and also of the fire are not at present explainable." Such is the usual statement about these too frequent occurrences, but it is pretty certain that they would not happen if sufficient care were taken. Knowing though they do the enormous power of the agent which they are endeavouring to control and to break in to our service, the electrical engineers from their familiarity with the matter may perhaps forget that their supposed servant will, if they are not very careful, turn out to be master and it may be doubted if the necessity for extreme care as to fittings and insulation is always realised by them and by the workmen employed by them.

"A Doctor's Error."

The above heading occurs over the report of an inquiry into the cause of death of a member of the town council of Blackburn which was held on May 26th. His medical attendant made up for him a bottle of medicine and a liniment of aconite, belladonna, and chloroform, and through a momentary distraction of attention "he must inadvertently have selected the wrong bottle" for the label he was moistening. "The jury returned a verdict of 'Death from misadventure' and expressed the opinion that liniment should be placed in bottles of a distinctive shape and labeled 'poison.'" They condoled with the bereaved family and the foreman referred to the medical attendant's manly admission of his serious error saying that his conduct had not been evasive but open from beginning to end.

June 2nd.

WALES AND WESTERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENTS.)

Pontypridd Workhouse Extension.

IN spite of the good wages and regular employment which have prevailed for several years past in the districts which comprise the Pontypridd Poor-law union it has been found necessary to increase the workhouse accommodation. The present workhouse, which was erected in the year 1865 and has been from time to time enlarged until there is now room for 320 inmates, is situated in the town of Pontypridd on a site where there is no adjacent land available for further additions. The total population included within the area of the union is over 200,000 and 120,000 of these reside in the two Rhondda valleys, the nearest portion of which is distant about two miles and the furthest about 12 miles from the workhouse. The board of guardians very properly, therefore, decided to establish a secondary workhouse in the centre of the large Rhondda population and within the next few weeks buildings will be brought into use which have been erected at a cost of £12,000 for the accommodation of 60 men, 30 women, and 12 married couples. The institution includes a house for the master with a board-room and extensive store-rooms, four separate pavilions, and a lodge. Three of the pavilions are two storeys high and are arranged on identical lines. On the ground floor there are two day-rooms, a large kitchen and pantry, a bath-room with two stoneware baths, and a lavatory with a range of four basins. On the first floor there are three wards to accommodate 11, 11, and eight persons respectively, a nurses' bedroom and sitting-room, four water-closets, and two slop sinks. The site of the buildings on the hillside lends itself well to the provision of fire-escapes from the upper floors of the pavilions where in the two largest wards a door opening outwards gives exit to a bridge terminating on the slope of the hill. The fourth pavilion is one storey high and is for the accommodation of 12 married couples, each of whom has a bedroom measuring 15 feet by 12 feet in which there are two fixed cupboards, suitable hanging pegs and furniture, and a fireplace with a Dutch oven. For the use of each six couples there are two baths, two lavatory basins, two water-closets, and a large kitchen centrally situated; in this pavilion are a double-bedded room for nurses and a large sitting-room. Some care has been taken in the design of these buildings in the direction of avoiding dust-collecting ledges; for example, there are no architraves to the windows, although they are provided round the doorways while there are several exposed beams which will be difficult to keep free from dust. The buildings are constructed of local stone with pebble stucco; the inside walls are covered with a smooth adamant cement. Taken as a whole, the Pontypridd board of guardians may be congratulated upon the acquisition of a well-thought-out and excellently planned institution.

Llanelly Cottage Hospital.

The Llanelly Cottage Hospital, which was established in 1867 and has now accommodation for 30 patients, is in a much more prosperous condition than it has been for

many years. The committee of management is composed jointly of employers and workmen and of the £1500 contributed during the past year towards the funds of the institution no less a sum than £621 was obtained from periodical collections made in the works of the district. A further sum of £400 was the result of a fête organised by Mr. Studt, a popular Welsh showman, through whose coöperation many hospitals in the Principality benefit every year.

Weston-super-Mare Children's Convalescent Home.

This excellent institution has now been established about nine years and is for the benefit of children attending the public elementary schools in Bristol and of those who have been inmates of the Bristol hospitals. At the annual meeting which was held on May 29th it was stated that 324 children had been in the home during the past 12 months and that the total expenses had been only £547.

New Asylum for Newport.

A new asylum is being erected for the Newport (Mon.) corporation on a site near the river Usk at Caerleon and the foundation stone was laid on May 27th in the presence of a large gathering. The asylum when complete will accommodate 368 patients (184 of either sex). At present it is intended to proceed with the erection of six blocks of the building.

June 1st.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

Glasgow Obstetrical and Gynæcological Society: Visit of Dr. Howard A. Kelly.

MEDICAL practitioners in Glasgow and the West of Scotland will be interested in hearing that Dr. Howard A. Kelly of Baltimore, the honorary President of the society, is to visit Glasgow and to deliver the presidential address in the Faculty Hall on Wednesday, June 17th, at 8.30 P.M. The subject that he has chosen is one of general interest, the History of Appendicitis in Great Britain. All medical practitioners are invited. I understand also that the Edinburgh and Glasgow Obstetrical Societies are to meet in joint session in the same hall on the following day at 5.30 P.M., when Dr. Kelly will introduce a discussion on the Extirpation of the Uterus and Appendages in Serious Pelvic Inflammation, and the two societies are afterwards to dine together in the neighbouring Windsor Hotel.

Aberdeen University Medical Society.

The summer session of Aberdeen University Medical Society was opened on May 29th with a lecture by Dr. J. Marnoch on Recent Works and Opinions on the Etiology of Cancer. Professor J. T. Cash presided and with him on the platform were Dr. Angus Fraser and Dr. Ashley W. Mackintosh. The chairman congratulated the large number of members present on the continuance of their meetings in the summer time when there were so many attractions of other kinds. Dr. Marnoch needed no introduction to them. He knew his subject and was an excellent teacher. Dr. Marnoch then gave in review the work recently accomplished in connexion with cancer. Dr. A. Wolff had recently shown from statistics collected throughout Europe that high cancer areas were associated with (1) districts which were well wooded, especially if they were also well watered, a result in direct variance with statistics previously obtained from England and Wales; and (2) districts where much beer and cider were drunk—e.g., Bavaria and Lille. The deaths from cancer in the eight principal Scotch towns in 1872, with a population of about 1,000,000, were 445; in 1902, with a population of about 1,500,000, they were 1523; so that cancer was on the increase in spite of allowing for increased accuracy of diagnosis. The parasitic and the anti-parasitic views were then discussed and the lecturer showed that the bulk of evidence was against the disease being parasitic in origin. On the conclusion of the lecture Dr. Marnoch was heartily applauded. Dr. Fraser said that he had learned a good deal and had listened with the greatest pleasure and instruction to the admirable *résumé* on cancer from Dr. Marnoch. He had had the modesty not to refer to it, but Dr. Marnoch had done original work in the matter himself and was therefore all the more entitled to speak with some authority on the subject. He had pleasure in moving a hearty vote of thanks to Dr. Marnoch for his interesting and educative lecture. Dr. Marnoch, in replying, congratulated the society upon its vitality. The meeting terminated with a vote of thanks to the chairman, proposed by Mr. George Hall.

June 2nd.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

The Nursing Scandal at Granard Union.

THE prolonged inquiry by the Local Government Board into the state of things which prevailed in the union hospital at Granard has at last come to an end. After considerable delay the decision of the Board was recently conveyed in a letter to the guardians read at their meeting on May 18th. The letter stated that the evidence "revealed a condition of things regarding the provision made by the guardians for the care of the sick and infirm which may be described as shocking." It contains a long indictment of the guardians for their neglect and for their failure to support their medical officer in the reforms which he attempted to bring about. Their action in calling on Dr J. M. S. Kenny to resign because he would not permit a wardsmaid to do nursing duties after a trained nurse had been engaged, is described in the report as "a most improper attempt to intimidate an officer in the conscientious discharge of his professional duties." The report states that "the list of nursing duties that the nuns of Granard workhouse gave as outside their province as nurses in charge of sick wards came upon the Local Government Board as a surprise." Another meeting of the guardians took place on the 25th, when a letter from the sisters tendering their resignation was received. A committee of the guardians waited upon them and they consented to remain for the present in the workhouse provided that "the board would insist on Dr. Kenny not making use of insulting and abusive language to them in the interval and that a ruling to this effect was inserted in the minutes." A resolution to that effect was passed accordingly and subsequently it was resolved:—

That having now heard the report of the Local Government Board in regard to the recent sworn inquiry—an inquiry which took up much time and cost so much to all parties—that the Local Government Board be requested to state why in framing their report they did not go into the real root of the evil, namely, the want of harmony between Dr. Kenny and the nursing staff, and that inasmuch as no improvements in the house can, in our opinion, stop this long existing friction, we now ask the Local Government Board either to go into the matter or give their reasons for passing it over.

The nursing sisters at Mullingar union hospital have since resigned in consequence of the action of Dr. Kenny and the Local Government Board but have agreed conditionally to remain in charge of the infirmary for one week.

Distinctions won by Students of Queen's College, Cork.

At the recent medical examinations at the Royal University two Cork students were particularly successful. At the second examination Mr. W. A. M'Kee was awarded first-class honours and a first-class exhibition of the value of £25. No other student obtained honours or an exhibition at this examination. At the M.B., B.Ch., B.A.O. degrees examination Mr. Norcott Harvey, also a student of the Cork College, was awarded first-class honours and a first-class exhibition of the value of £40. He was the only one of the candidates who won those distinctions. That means that in these two examinations students of Queen's College, Cork, headed the list. At the examinations at the Royal Colleges of Physicians and Surgeons of Ireland held about the same time another Cork student, Captain Dorgan, R.A.M.C., a candidate for the diploma in sanitary science, obtained first place in all Ireland and was awarded honours.

Dispensary Contest in the Ardee Union.

In THE LANCET of May 23rd, p. 1484, it was announced that on May 5th Mr. W. H. Crean of Dungarvan was elected medical officer of Drumconrath dispensary in the Ardee Union, co. Louth. The original salary was £120 per annum and £30 as medical officer of health. The two local men, in loyal adherence to the resolution of the local branch of the Irish Medical Association, declined to become candidates until the salary was raised to £200, the minimum suggested by that association. On May 14th, at a meeting of the county Louth branch of the Irish Medical Association, the following motion was unanimously passed:—

That we, the members of the Irish Medical Association, reiterate our determination to adhere to the resolutions of the Irish Medical Association dealing with practitioners who take dispensaries under the stipulated salaries.

At a meeting of the Ardee board of guardians held on May 19th a letter of resignation was read from Mr. Crean. The Drumconrath dispensary is therefore still vacant after three attempts at an election. This is a great victory for the Irish Medical Association and is in favour of combination.

The Irish Medical Association.

The annual meeting of the Irish Medical Association is to be held in Enniskillen on Wednesday, June 17th, under the presidency of Dr. L. Kidd, surgeon to the Fermanagh County Infirmary, and owing to the very keen interest aroused at present in the conflict between the Poor-law medical officers and the local and central authorities the attendance promises to be a record one. The following is the programme:—

The first meeting will be in the town-hall, Enniskillen, at 2.15 P.M., the President being in the chair. Minutes of the meetings held on June 3rd, Oct. 21st, and Nov. 11th, 1902. Report of the council and financial statement for the past year.

Motions to be Brought Forward.

1. That the report of council and financial statement for the past year be adopted. Report of the scrutineers of the ballot. The newly-elected President to take the chair.
2. That the best thanks of the association be given to the outgoing President (Dr. Cranny) for the manner in which he has filled that office during the past year.

Proposed Scheme.

The Council recommend the following resolutions and invite discussion thereon:—

3. That the minimum salaries for dispensaries be £200; for workhouses, £120; or both combined, £300.
4. That medical officers in the Poor-law service be entitled, as a matter of right, to superannuation on the Civil Service scale.
5. That all medical officers in the Poor-law service be entitled to four weeks' annual vacation in accordance with Article 28 of the Local Government Board rules; and that the payment of the locum tenens be as provided for by Section 5 in the Local Government Amendment Act, 1902.
6. That the fees for discharge of temporary duty be:—

	£	s.	d.	
Dispensaries	4	4	0	per week.
Workhouses	3	3	0	,,
Both combined	5	5	0	,,
Periods less than a week	1	1	0	per day.

7. That the fees for consultations be:—

	£	s.	d.
In difficult midwifery and surgical cases—			
(*a*) Between 8 P.M. and 8 A.M. and for a distance exceeding three miles, but not exceeding 12 ...	3	3	0
(*b*) Between 8 P.M. and 8 A.M. and for a distance up to three miles	2	2	0
(*c*) Between 8 A.M. and 8 P.M. and for any distance not exceeding 12 miles	2	2	0
In ordinary consultations other than above—			
(*a*) Between 8 P.M. and 8 A.M.	2	2	0
(*b*) Between 8 A.M. and 8 P.M.	1	1	0

Distance not to exceed in either case 12 miles.

8. Appointment of two auditors.

A banquet will be held in the same place in the evening at 7.45 P.M. and on Thursday, June 18th, an excursion will take place to Bundoran. The railway companies are issuing return tickets from all parts of Ireland available from June 15th to 18th inclusive at a fare and a quarter for all classes.

Medical Fees in Omagh Union.

In THE LANCET of May 23rd, p. 1485, reference was made to the extraordinary treatment of Dr. E. C. Thompson, M.P., by the Omagh guardians in having summarily dispensed with his services while acting for Dr. H. B. Fleming who was ill. Dr. Thompson demanded £12 12*s.* for his four days' attendance at the workhouse. At the meeting of the guardians on the 30th the clerk suggested that the guardians should offer Dr. Thompson £3 3*s.*, the amount he said required by the Tyrone Medical Association. The chairman said that in addition to tendering this sum they should add that they were sorry Dr. Thompson should feel that they did not treat him with the same courtesy that he expected.

Extraordinary Action of the Irish Local Government Board.

Dr. John Bolster having resigned the Tinahely dispensary, co. Wicklow, the Shillelagh guardians decided to increase the salary for the incoming medical man by £30, making it £150, instead of £120 as formerly, fearing they might not have applicants at the old salary. When asked to sanction this arrangement the Local Government Board refused to approve of the increase, as it understood that there was good private practice for a medical officer at Tinahely and that it saw "no reason to doubt but that a number of eligible candidates will offer themselves for the vacant dispensary at the existing salary and emoluments." The chairman of the board of guardians, when this communication from the Local Government Board was read, said he supposed that any expense they would go to in advertising the appointment at £120 a year without getting any replies would be borne by the Local Government Board. It is to be hoped that no medical man will apply for the post in order to teach the central authority (the Local Government Board) in Dublin a salutary lesson. Its action in this matter is most insulting to the medical profession and is extremely stupid when taken with the fact that it constantly replies to the demands of the Poor-law medical officers that it is no use agitating for higher salaries when on the occasion of any vacancy numbers apply at the old rates. The truth is that in Ireland at present the Local Government Board, from its want of pursuing a consistent policy, is being very greatly discredited.

June 2nd.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

Syphilis and Suicide.

AT the meeting of the Academy of Medicine held on May 19th Professor Fournier discoursed upon the question of suicide in syphilitic patients. He had had personal experience of 18 cases and many others had been observed by his colleagues. Professor Fournier has done more than anyone else to enlighten the public as regards the terrible dangers of syphilis. He is anxious that this plague should be brought into the full light of day, for it is not made enough of. Syphilis, he added, requires a long and patient treatment, for it has terrible hereditary effects and causes veritable social ravages. The extremely active anti-syphilitic campaign initiated by Professor Fournier has taught syphilitic patients something and it was indeed a necessity; moreover, it is in no way responsible for the sudden attacks of madness which incite these unfortunates to suicide. Professor Fournier divided his cases into four classes: (1) those who kill themselves in an access of delirium coming on in the course of cerebral syphilis; (2) those who despair of any cure for the various manifestations of the disease, the knowledge of which makes them lose their courage; (3) nervous patients who kill themselves on learning the nature of their disease; and (4) those who discover their complaint on the eve of marriage and do not stop to find any other way of breaking their engagement. Professor Fournier implored all medical men to use great tact in announcing their diagnosis to nervous and impressionable subjects and reminded his audience that syphilis as a whole is one of the most easily curable diseases.

Surgical Intervention in Pulmonary Gangrene.

For two successive meetings the Society of Surgery has been discussing the subject of pulmonary gangrene and the surgical relief of this condition. The first meeting was held on May 13th when M. Lejars related many cases occurring in his own practice in which he had interfered surgically. He reminded his audience that not all cases of pulmonary gangrene were fitted for operation. Interference should only be undertaken when the gangrenous foci were strictly localised and limited; moreover, stethoscopy by a trained ear was to be relied upon in diagnosis far more than any other method. Radiography especially was liable to give most uncertain results. The other lung should also be in a sufficiently healthy state to struggle successfully against a possible infection from the diseased side. As a rule the operation is easy, although sometimes difficult owing to the existence of multiple gangrenous foci. M. Lejars laid stress on one point in the technique of the operation—namely, that a large opening should be made in the thorax in order to have plenty of light and also that later the chest wall might easily fall in so as to fill up the void caused by the retraction of the pulmonary tissue. Although cases of cure by operation are not rare, yet they are not absolutely lasting. Statistics cannot yet be furnished of the frequency of relapses but they are fairly numerous. At the adjourned meeting held on May 20th M. Tuffier spoke. He agreed with M. Lejars, but he added that they must not forget that surgical interference only substituted artificial for bronchial drainage. If the latter were sufficient it was useless to interfere; if not, a free thoracotomy must be done, only as far as possible the operator should avoid opening the pleura. Prognosis varied in every case and depended mainly upon the cause of the gangrene. Interlobar pleurisy with superficial gangrene must be distinguished from pulmonary gangrene

properly so called. It is true that the diagnosis between these two forms is difficult, but it should be made where possible, for the prognosis of the two is very different. It is important to ascertain whether the gangrene is accompanied by bronchiectasis, for in such cases complete cure is rare. M. Tuffier concluded by remarking that gangrene is sometimes due to a foreign body. He had seen two cases of gangrene following the removal of adenoid vegetation. In the one case he had had to open two interlobar abscesses and the patient recovered. In the other case there was a fœtid cerebral abscess and the patient died. In another case under his care gangrene was caused by a portion of the bone of a calf. M Tuffier opened and drained the abscess. The cavity, however, took eight months to close and the patient had constant cough. In 11 cases M. Tuffier had four deaths and seven recoveries. Of the deaths three were due to secondary hæmorrhage and the fourth to septicæmia. Of the seven recoveries two were complete and five were incomplete.

June 3rd.

CANADA.

(FROM OUR OWN CORRESPONDENT.)

The Lady Minto Hospital Fund.

NOT long since the Countess of Minto invited a number of the business men of Ottawa to Government House, when she explained in an address what had been done in connexion with the Lady Minto Cottage Hospital Fund. The sum of $20,000 had been raised and with this sum the districts which were considered to be most in need of hospitals had been assisted. Ten hospitals are now in working order and four new ones will be opened shortly. There are now 68 nurses of the Victorian Order in active work, some being employed in hospitals and the rest in district nursing. The 18 towns that employed these nurses raised their funds locally to pay their salaries. Her Excellency pointed out that the central fund had been supported from three places—Montreal, Toronto, and Ottawa. This she considered unfair, as the scheme affected the whole Dominion. Her object is now to raise an endowment fund which will realise an income of $5000 per annum. Dr. T. Gibson of Ottawa, the honorary secretary of the Victorian Order, stated that it was the desire of Lady Minto to have the endowment fund raised before her departure for England. The capital sum aimed at was $123,000 and towards this end a few gentlemen of Montreal had already contributed $36,500. A committee of the business men of Ottawa was formed to commence the work of organisation and to secure subscriptions.

Tuberculosis Conference.

The Governor-General, Lord Minto, delivered an address at the third annual conference of the Canadian Association for the Prevention of Consumption held at Ottawa on April 15th. He stated that he believed that there were annually not less than 30,000 cases of consumption in the Dominion of Canada and that the number of deaths was about 9000. The association had performed a great service by drawing the attention of the public to the ravages of the disease. Dr. H. Beaumont Small of Ottawa read the annual report which dealt especially with the educational propaganda which had been carried on during the past year. In Canada out of 36 hospitals only 13 had special accommodation for the treatment of tuberculous patients. Dr. A. J. Richer of Montreal, honorary secretary of the Montreal League for the Suppression and Prevention of Consumption, which has lately been affiliated with the central body at Ottawa, read a paper on the Economic Aspect of Tuberculosis in which he estimated the annual loss to Canada from tuberculosis at $72,000,000, which was based on the deaths and sickness from the disease. He further contrasted the action of the Dominion Government in relation to its expenditure annually in the prevention of tuberculosis in the animal and human kind. While the Government had spent last year $1000 in the prevention of tuberculosis in the human being, it had expended nearly 40 times that amount in the same cause amongst cattle.

The Insane in British Columbia.

Dr. Manchester, the medical superintendent in charge of the provincial asylum for the insane at New Westminster, British Columbia, has issued his official report for the past year. The year commenced with 284 patients in residence in the institution and eight on probation. During the year 121 new patients were admitted, 95 males and 26 females. The increase in admissions as compared with the previous year numbered six, all males. The discharges numbered 61 and the deaths 26, these figures being almost identical with those of the previous year. The year closed with 16 patients still on probation and 311 in residence. Of the total number admitted 50·41 per cent. were discharged, not including the deaths, 24·8 per cent. recovered and 25·6 had not recovered. In some quarters it seemed to be the prevalent belief that the percentage of insanity was higher in the province of British Columbia than in any of the other provinces of the Dominion, but Dr. Manchester in his report disproves this and states that quite the reverse is true. The total number of insane in the entire Dominion of Canada according to statistics is 16,495, or 3·1 per 1000 of population. In British Columbia the total is 299, or 1·67 per 1000 of population, the other provinces being thus accounted for: Manitoba, 565, or 2·21; New Brunswick, 1054, or 3·18; Nova Scotia, 1392, or 3·02; Ontario, 7511, or 3·44; Prince Edward Island, 357, or 3·45; and Quebec, 5245, or 3·18.

Cases of Gastric Ulcer occurring in the Royal Victoria Hospital, Montreal, during the past Eight Years.

Dr. E. P. L. Cantlie, externe in clinical medicine at the Royal Victoria Hospital, Montreal, has published in the April issue of the *Montreal Medical Journal* an analysis of the cases of gastric ulcer occurring in that institution during the past eight years. During that period of time there were in all admitted to the institution 20,596 cases, of which number 85 were cases of gastric ulcer, three being in males and 82 in females. More than one-half of these were native-born Canadians, more than one quarter were born in Great Britain, while the balance came from the United States and other places. The ages varied from 17 to 70 years, the average being 27½ years. There were eight patients under 20 years of age and ten over 40. The most frequent time of all was the third decade, 49 out of the 75 patients where the age was recorded being between 20 and 30 years. 34 patients were servants, 14 were housekeepers, and only two gave occupations definitely as cooks. Anæmia was an associated condition in 42 cases. In five of the cases there were no prior symptoms relating to the stomach. Of the surgical cases all but one were admitted after perforation had occurred. These numbered eight, with seven recoveries. Of the 83 cases of which records have been kept, 39 are recorded as cured, 34 as improved, one is noted as unimproved, and in six the result is unrecorded. Two patients died, one from perforation and general peritonitis and the other from hæmorrhage. In this last case multiple erosions were found post mortem.

Typhoid Fever in the Royal Victoria Hospital, Montreal, in 1902.

Dr. Colin K. Russil, senior resident physician at the Royal Victoria Hospital, Montreal, has compiled for the *Montreal Medical Journal* statistics relating to the cases of typhoid fever occurring in that institution for the year 1902. In all there were 90 cases treated, 58 males and 32 females. Of these 75 were treated to a conclusion, 15 being still under treatment at the time the report was published. The average age of all the patients was 23 years, the youngest being three and the oldest 63 years old. Arranged in decades they are as follows: under 10 years, six cases; from 10 to 20 years, 19; from 20 to 30 years, 36; from 30 to 40 years, 11; from 40 to 50 years, one; and from 50 to 60 years, two. The largest number of cases were admitted during the month of August, there being 17 admissions during that month. The average day of disease on admission was the ninth. The average number of days in the hospital was 38·5. The average duration of fever after admission was 31·5 days. The longest period of fever after admission was 42 days. The shortest period of fever while in hospital was seven days, of which there were two cases. Diarrhœa was present at the onset of the disease in 33·3 per cent. Constipation was present at the onset of the disease in 48 per cent. Vomiting was present at the onset in 32·2 per cent. Epistaxis was present at the onset in 18·6 per cent. An eruption was present in 81·2 per cent. of cases. The earliest appearance of the rash was on the fourth day and the latest on the twenty-ninth day. In two cases the rash appeared only during the relapse. The average duration of the rash was 15 days, the shortest being three days and the longest 27 days. The Widal test was tried in all cases. It was negative in six. The test was tried in 39 cases on discharge; it was present in 35, absent in three, and

doubtful in one. In one case it appeared on the fifth day. In another it was not present until the twenty-fourth day of the disease. It was present on the average on the thirteenth day. In 21 cases it was present on admission. There were four fatal cases recorded as follows: typhoid fever with perforation, operation, death; typhoid fever, perforation, and death; typhoid fever, toxæmia, intestinal hæmorrhage, extreme toxæmia, and death; and typhoid fever with purpuric eruption, toxæmia, and death.

The Proposed Dominion Medical Council.

The Quebec Legislature has rejected by a large majority the motion to ratify the Canada Medical Act, 1902, commonly known as the Roddick Law. This Act was procured from the Dominion Parliament after persistent and patient effort on the part of Dr. Roddick, M.P., for many long years. It was passed at the last session of that parliament on the understanding that before it became operable it must be ratified by the legislatures of the different provinces. Quebec has refused to do this and as a consequence Dominion registration has received a set back, but it is hoped only for a time. During the past few months amendments to the Act of 1902 have been agitated for in the province of Quebec and the question of asking for these was brought before the Montreal Medical Society, with the result that a special committee was appointed which made a report on March 31st last in favour of certain amendments, which report is said to have been adopted. It would appear that the great difficulty on the part of the province of Quebec is the desire of one of the universities of the province to extend over the whole Dominion its prerogatives which at present are confined to that province. In other words, the majority in Quebec would give the holder of a Quebec university degree in medicine the right without further examination to practise anywhere in the Dominion. Their meaning is quite clear without quoting in full the proposed amendments. This does not suit the taste of the University of Toronto in the province of Ontario, and its medical faculty has prepared a memorandum calling attention to these proposed amendments to the Canada Medical Act which, if allowed to proceed further without opposition, would result in prejudicing the course of medical education in the province of Ontario. That the whole question will have to be thrashed out again before the provincial and national medical societies seems certain. All the other provinces have taken the necessary steps to have the Act ratified on the initiation of their respective medical councils, each of which has approved of such legislation. The College of Physicians and Surgeons of Quebec refused to recommend any ratification legislation to the Quebec House, hence the rejection of an independent motion.

Toronto, May 16th.

GLASGOW UNIVERSITY CLUB. — Mr. George Wyndham, M.P., Lord Rector of the Glasgow University, took the chair at the dinner organised by the Glasgow University Club (London) and held at the Trocadéro Restaurant, London, on May 29th. Among those present were the Earl of Lytton, Lord Shand, Professor A. C. Bradley, Professor John Adams, Professor W. P. Ker, Professor J. M. Thomson, Professor J. H. Byles, Dr. Guthrie Rankin, Dr. H. Carmichael, Lieutenant-Colonel W. Babtie, V.C., C.M.G., R.A.M.C., Mr. Edmund Owen, and Dr. C. O. Hawthorne. In giving the toast of "The University and the Club" the chairman said that he had received letters of apology for non-attendance at the dinner from Lord Kelvin, Lord Lister, Sir W. Gairdner, Sir W. Ramsay, and Professor Dewar. Continuing, the chairman said that it had been asked why the Glasgow University Club met in London; the answer was that London was the most appropriate place for such a dinner. That city had become the heart of a world-wide empire, of which no portion yielded so many servants to the State as the Scottish universities. Professor Bradley proposed "The Houses of Parliament," which was responded to by Lord Lytton and Mr. W. J. Galloway, M.P. In replying to the toast of "The Guests," proposed by Mr. J. M. Dodds, Mr. Edmund Owen said that Scotland, and Glasgow in particular, had supplied a great number of men of science. He thought that that was due to the splendid education in Scotland. The toast was also replied to by Mr. C. M. Drew, President of the Glasgow University Union. The toast of "The Chairman" was proposed by Mr. D. A. Dick, President of the Students' Representative Council, University of Glasgow, and after the chairman had replied the proceedings terminated.

THE GENERAL COUNCIL OF MEDICAL EDUCATION AND REGISTRATION.

WEDNESDAY, MAY 27TH.

The Council continued its proceedings to-day, Sir WILLIAM TURNER being in the chair.

After the confirmation of the minutes of yesterday's meeting,

Mr. BROWN said he wished the Council to go into *camerâ* at once. He wanted to call attention to a minute of the Executive Committee in regard to a matter affecting a practitioner about whom he had received a letter that morning.

The PRESIDENT: That is not the business before us to-day.

Mr. BROWN agreed that it was not but he wished also when *in camerâ* to put a question in relation to the business on the programme for that afternoon.

The PRESIDENT: You cannot alter the Executive Committe's minutes in Council, but I understand that you want to discuss a point about the first case on to-day's business programme before the parties to that case are called? Is the Council satisfied that it should be so?

No assent was given.

Mr. BROWN: Then I move formally that the Council go into *camerâ* before the parties in the first case are called.

Dr. BRUCE seconded the motion, which on a vote was rejected by 13 to 7.

The PRESIDENT asked that the parties to the case referred to should be called.

Dr. WILLIAM GEORGE NIALL, registered as of Kinkora, Dabdune-crescent, Guildford, M.D., Mast. Surg. 1886, R. Univ. Irel., who had been summoned to answer a charge formulated by the Council's solicitor, answered the call, accompanied by his counsel, Mr. BODKIN, who in reply to a question explained that he was appearing with Mr. Symmons, instructed by Mr. Kempson, solicitor.

Dr. BATEMAN also answered as representing the Medical Defence Union (the complainants), and replying to the PRESIDENT stated that he had witnesses in attendance, but he ventured to say that the case was one which he thought should be heard *in camerâ*.

The PRESIDENT: What do you say, Mr. Bodkin?

Mr. BODKIN: I have nothing to say. I cannot oppose it or assent to it because of the particular view I take of the case.

The PRESIDENT: You are neutral.

Mr. BODKIN: Entirely.

The PRESIDENT then put the question that the Council go into *camerâ* on the case.

There was no dissent expressed and strangers were accordingly asked to withdraw. They were not readmitted during the sitting, which was prolonged beyond the ordinary time of adjournment.

It is understood that considerable controversy and difficulty arose on the question of taking evidence in the case and when eventually it was decided to hear witnesses time would permit of the examination of only those called by the complainants. So the case had to be adjourned till Thursday. The witnesses for the defence in attendance numbered about a dozen.

THURSDAY, MAY 28TH.

The Council resumed its sittings to-day, Sir WILLIAM TURNER, the President, being in the chair.

The Case of Dr. William George Niall.

The Council at once went again into *camerâ* on this case, but after a further consideration of it for an hour and a half decided to adjourn it till the November session.

The Case of Mr. D. B. Bradlaw.

The Council proceeded with the case of David Barnett Bradlaw, registered as of 4, Harrington-street, Dublin, Lic., Lic. Midwif. 1899, R. Coll. Phys. Irel., Lic., Lic. Midwif. 1899, R. Coll. Surg. Irel., who had been summoned to appear before the Council to answer the following charge, as formulated by the Council's solicitor:—

That you, being a registered medical practitioner, have associated yourself in dental practice with your brother, Henry Jacob Bradlaw, a dental practitioner, registered as residing at No. 4, Harrington-street, Dublin, and have carried on a dental practice at No. 146, Inverness-terrace, Bayswater, W., in your said brother's name, and

have personated him; and further, that the dental practice carried on at No. 146, Inverness-terrace, as aforesaid is extensively advertised by pamphlets and in newspapers and otherwise.

Mr. Bradlaw appeared to answer the charge, accompanied by Mr. A. Houston and Mr. L. H. Rosenthal, his counsel, instructed by Mr. Emanuel, his solicitor. Mr. R. W. Turner, instructed by Messrs. Bowman and Curtis-Hayward, attended in support of the case for the complainants, the British Dental Association. The Council's solicitor read the notice to attend.

Mr. TURNER explained that this case arose out of proceedings taken in the Marylebone police-court in March last. There were two brass plates on the door at 146, Inverness-terrace, one giving the name of the accused and the other that of his brother, the dental practitioner. Mr. D. B. Bradlaw, in the defence he had put in, stated that he had sublet part of his house and attended dental patients when his brother was absent in Ireland, but he did not tell them that he was either the medical or dental practitioner. As regards the advertising he had absolutely nothing to do with it. He was quite prepared to make his brother give up advertising or to take another address. He had not associated himself in trade with his brother and he had not done anything against the honour of his profession. He asked the Council to overlook his error of judgment.

The other statutory declarations were held as read.

Mr. HOUSTON did not dispute the facts and proceeded to address the Council. He said that Mr. Bradlaw was a man of very good reputation and had testimonials of the strongest from a number of the most eminent men in his own country. These testimonials showed that Mr. Bradlaw was a practised dentist and if they convicted him of the charge, it would be on the word of what he might call an inquiry agent and would disregard the testimonials from these eminent men who knew him. With respect to the advertising, the advertisements were perfectly harmless; and that the two practices were carried on in the same house could not detract anything from the character of the medical man from whose house the advertisements were issued. He denied personating his brother or associating with him in his business, but he was never asked in his brother's absence whether he was the brother or the other. He expressed his regret for anything done. He had stopped the advertising and also the dental practice. The brother, if he set up another practice, was not to be permitted to set it up at Inverness-terrace.

This closed the case and the Council deliberated in private. On the readmission of strangers,

The PRESIDENT, addressing Mr. Bradlaw, said: The Council has deliberated on your case and the conclusion it has come to is—that the facts alleged against you in the notice of inquiry have been proved to its satisfaction, but it is willing to give you an opportunity of satisfying it as to your conduct in the future, and it will adjourn further consideration till next session. You will then have to appear before the Council and satisfy it that your conduct in the interval has been quite satisfactory.

Mr. BRADLAW: Thank you.

The Case of Mr. E. A. Cloete Smith.

Consideration was next given to the case of Edward Arnold Cloete Smith, registered as of 1, Westbourne-street, W., Mem. R. Coll. Surg. Eng. 1884, Lic. R. Coll. Phys. Lond. 1884, who had been summoned to appear before the Council to answer the following charge, as formulated by the Council's solicitor:—

That you have systematically sought to attract practice and patients by means of circulars, circular letters, and inspired articles in the lay press, the circulars and circular letters printing your name, and in some cases your address, and publishing your name as surgeon of an institution which publicly advertises treatment of cancer by electricity, called the Free Hospital for Medical Treatment of Cancer by Electricity.

Mr. Cloete Smith appeared to answer the charge accompanied by Dr. Hugh Woods, Secretary of the London and Counties Medical Protection Society, of which he was a member, and Mr. J. W. H. Thompson, a solicitor, who attended as a witness.

Dr. BATEMAN attended on behalf of the Medical Defence Union, the complainants, and in opening the case, explained that the Free Hospital was at Notting Hill Gate and Mr. Cloete Smith was the physician in attendance. If Mr. Cloete Smith did not circulate the prints himself they were circulated for him, and he ventured to submit that the accused had been guilty of advertising for the purpose of procuring patients.

Mr. T. W. TYRRELL, clerk to Messrs. Hempson, went into the witness-box and confirmed a statutory declaration of his which was held as read.

In answer to Mr. Thompson he said that at the hospital he asked whether they accepted donations, and was told that they did. Asked if he saw anything in the hospital that was not in other hospitals he replied, certainly, for he saw two luxuriously furnished waiting rooms.

This closed the case for the complainants.

Mr. CLOETE SMITH asked the Council to allow Dr. Woods to conduct his case.

After some conversation Dr. Woods received permission to put questions.

Mr. J. W. H. THOMPSON, the solicitor accompanying Mr. Cloete Smith, in answer to Dr. WOODS, said that he and his wife had some money, and his wife wished to take some of it in research of treatment of cancer. The result of that was that they founded the hospital and asked Mr. Cloete Smith to act as physician of it. Mr. Cloete Smith was an old friend of his, and witness knew that for years he had been doing work in electricity. Witness was entirely responsible for the money. He took the house for two years as he was given to understand that nothing very satisfactory could be done in less than that time. It was a perfectly charitable institution: there was no element of profit in it. He never meant to make money from it and he asked no one for money. He had agreed to pay Mr. Cloete Smith 50 guineas, but that gentleman did not wish to take anything. Witness knew that probably he wanted a horse and he offered the money. Neither Mr. Cloete Smith nor anyone could make any profit out of the hospital, and witness was unaware of anything in the nature of advertising the hospital for Mr. Cloete Smith's advantage. With reference to a circular which was being issued by Mrs. Helen Black, a journalist, on one being handed to him he went to Mr. Cloete Smith's house and asked for an explanation. Mr. Cloete Smith assured him that he was not responsible for Mrs. Black's letters and that he had in no way inspired them. His reason for going to Mr. Cloete Smith was that when the hospital was founded no statements issued by witness appeared in the lay press. He considered the explanation satisfactory. On the Tuesda following Easter-day a pressman called on him. He said that a statement in regard to the treatment of cancer by electricity was to appear in his paper next day and he asked witness if he would give him some kind of statement in regard to his hospital. Witness told him that no statements in regard to medical matters should appear in the lay press and he refused to give information. He took exception to the way in which Mr. Tyrrell's declaration had been made and the evidence obtained. When the hospital was first opened a circular letter was sent to every hospital in London as it was desirable to let the officers of these institutions know of the existence of a new hospital. Anybody, of course, could have gone to the hospital at any time. The Medical Defence Union had let the matter go on from the beginning of April until now. He had received no intimation that it was considered objectionable. He heard of it only the other day and as it appeared to be rather peculiar he took exception to it.

Dr. BATEMAN: Mr. Thompson's position in connexion with this hospital is absolutely *bonâ-fide* and unassailable and I have no questions to ask him.

Replying to the President, witness said that he had drawn up the original letter relating to the founding of the hospital; he had done it for his wife.

In answer to Sir VICTOR HORSLEY, witness said that the hospital premises had, he believed, always been used as a private house. He was paying £160 per annum for the two years for it. He believed that everything had been done for the people who might come for treatment and the instruments and electricity appliances were second to none in London.

By Mr. BROWN: He found the entire expenses. As to one room being furnished better than another no distinction was made between people who came for treatment.

Mr. BROWN: Were there any means taken to exclude those who might be excluded.

The Witness: My wife personally sees the women applicants for admission and decides whether they are fit to be patients. The male applicants are looked after by my wife's secretary, who is an old schoolmaster, and he sees them all.

This having concluded Mr. Thompson's examination the further hearing was put off till Friday.

The English Conjoint Board's Report.

Sir VICTOR HORSLEY asked how it was that the report of the chairman of the Examination Committee on the question of the English Conjoint Board's primary examinations was not yet forthcoming. They had been promised that it would be in their hands on the morning of that day.

The PRESIDENT: No doubt you will get it to-morrow morning.

Sir VICTOR HORSLEY: But I am entitled to an answer to my question.

Mr. BRYANT: I think you have got a satisfactory answer. The report will be in the hands of the Council to-morrow.

Sir VICTOR HORSLEY: It is quite hopeless to expect to get a straight answer to a straight question from the chairman of the Examination Committee.

The Council adjourned.

FRIDAY, MAY 29TH.

The Council resumed to-day, Sir WILLIAM TURNER being in the chair.

The Case of Mr. Cloete Smith.

Proceedings in this case were continued, the parties appearing as before.

Mrs. HELEN BLACK, journalist, in answer to Dr. Woods, said that for years she had taken a great interest in the medical work connected with hospitals and had paid special attention to the recent discussions on the treatment of cancer. Some little time ago, about the end of February, she had written an article on the advantages of electricity in the treatment of cancer. That was done by her as a journalist. It was her own work and her own doing. It was published in the *Pall Mall Gazette*, but Mr. Cloete Smith had certainly not consulted with her before the article was published. She had had no interview with him on the subject and he knew nothing whatever about it. With reference to the so-called private letters or circulars sent out by her respecting the hospital in question, these had been sent out in reply to requests for information, sent out as private letters to her friends. She had got prints in order to avoid the trouble of writing. She had not mentioned the circular she was about to send out before she got copies printed. She had sent Mr. Cloete Smith a copy and on receiving it he had asked her to stop the issuing of them. She had no idea whatever that they were, or would be regarded as, advertisements. They were simply private answers wished by friends.

Cross-examined by Dr. BATEMAN: She had had several conversations—not what might be called interviews—with Mr. Cloete Smith. She had been told that his information and ability might be of advantage to her in connexion with a hospital at Southampton and she wanted to find out, but he had never asked her to advertise the Free Cancer Hospital. He had never asked her to bring before the public any facts about it and she had published the article in the *Pall Mall Gazette* without his knowledge or consent. She had 2000 copies of the circular printed but only about 350 had gone out.

In answer to questions by members of the Council she emphatically denied that the newspaper article in question was an inspired production. In any conversation she had with Mr. Cloete Smith no suggestion was made that the facts might be brought before the public that a small hospital was to be opened for the treatment of cancer. The conversation was general.

Mr. CLOETE SMITH then gave evidence. In examination by Dr. WOODS he said that he had no knowledge whatever of the printed circular which Mrs. Black issued before it was sent out by her and as soon as he heard of it he telegraphed to the lady to stop the issue. He had absolutely no knowledge whatever of, and was not associated in any way with, the article Mrs. Black had published in the *Pall Mall Gazette*. It was days after it appeared before he saw it. He had been a serious student of electricity for a considerable number of years and an article of the nature of that in question would not, in his opinion, redound to anyone's credit. He admitted having had conversations with Mrs. Black, but in these he had no idea that she was going to publish anything he had said. Asked if he was deriving any profit from his connexion with the hospital, he replied that he was working at a dead loss.

Cross-examined by Dr. BATEMAN: Is there anything done in the way of electrical treatment in this small hospital that is not done at every London hospital?—I fancy that the method is a little different. It may be more prolonged, there may be certain details in the treatment and in the instruments, and in these details there may be difference.

In answer to the PRESIDENT, witness said that the institution was not to be regarded as a home and it was not an in-patient hospital at all. It was to offer the advantage of special treatment.

After some further questions the evidence was concluded and Mr. CLOETE SMITH addressed the Council in defence of himself. The Council deliberated in private. On re-admission of the parties

The PRESIDENT, addressing Mr. Cloete Smith, said: The Council has decided that the facts alleged against you in the notice of inquiry have not been proved to its satisfaction.

University Representation on the Council.

The Council resumed consideration of the following motion by Mr. JACKSON, adjourned from Saturday last:—

That the Council petition the Privy Council that in the event of the Victoria University being divided into two or more separate universities a single representative should continue to represent the whole collectively.

Dr. MCVAIL opposed the motion. He thought that it would be a very unwise thing on the part of the Council to give any advice to the Government which would have the effect of raising against them the opinion of the people of Lancashire and Yorkshire, who were subscribing large sums of money for the purposes of higher education. He held that the younger colleges of Manchester, Liverpool, and Leeds would be all the better for being represented on the Council by themselves and if they were to propose to give to each of these colleges only one-third of a member, it would, in the opinion of the people of these localities, mean that these institutions were to be put on a lower level than the universities elsewhere, some of which were not as large as the Owens College, Manchester. The new question of having an extra chair or two in that room was neither here nor there. Suppose the Council were to pass this motion and to send it up to the Privy Council they might be told that they were exceeding their duty. Did they suppose that any Government would encounter the opposition of such an influential body of opinion as the people of Lancashire and Yorkshire? He hoped that the Council would decide against the motion by a large majority.

Sir C. NIXON said that it was not the business of the Council when a new university had been created by charter to volunteer its advice to the Government that the privileges of that university should be withheld from it. He sincerely hoped that the Council by an overwhelming majority would decide against the motion.

Sir VICTOR HORSLEY appealed to Mr. Jackson to withdraw his motion. He could not vote on the question one way or the other until he had seen the terms of the charter of the Victoria University. It might turn out that the university were not claiming representation and he should like to see the charter first.

Dr. BENNETT moved the "previous question."

Dr. ATTHILL seconded this amendment.

On a show of hands the "previous question" was carried and the motion accordingly dropped.

Examinations of the Apothecaries' Hall, Dublin.

The Council resumed consideration of the following motion by Dr. MACALISTER:—

That the President be requested to call the attention of the authorities of the Apothecaries' Hall, Dublin, to the case referred to in the Examination Committee's report on the July (1902) examinations; and to state that, in view of the legal interpretation placed by the Council's advisers on the terms of the Medical Act, 1886, the Council regards the course taken by the Apothecaries' Hall as irregular.

Mr. TICHBORNE now produced certain documents in connexion with the case. He said he did not think that there had been any great harm done, because the gentleman in question passed almost with honours; he got very high marks in two of the subjects and passed very well in the third.

The motion was agreed to.

A Special Session in July.

The next business on the agenda was "to receive a report from the Education Committee" and the following notice of motion by Mr. BRYANT:—

That the consideration by the Council of the inspectors' and visitors' reports, and of the report on these by the Examination Committee, be postponed until July 23th, when a special meeting of Council shall be held for the purpose of taking them into consideration.

The PRESIDENT said that they had got rid of their penal business, which had cost them a great deal of money, and he did not know that the result was altogether worth the money. But still they had gone through the most laborious and to many of them the most disagreeable task. Now they came to that part of their business which constituted in his judgment the most important part—namely, the question as to the education which a person was to receive and the examination through which he was to pass before he was admitted to the Medical Register. There was before the Council a large mass of important material to consider and first on the programme was "to receive a report from the Education Committee." Then came a motion by Mr. Bryant to postpone the consideration of the reports by the Examination Committee on the inspectors' and visitors' reports. Next followed reports by the Examination Committee on the inspection of final examinations and after that came reports by the same committee on the inspection of certain primary examinations. It was obvious from the notice of motion by Mr. Bryant that the question was going to be raised whether these reports of the Examination Committee should be considered at this session or postponed till a later date. He understood that the report of the Education Committee was intimately linked with the reports of the Examination Committee on the inspection of primary examinations, and the question arose in his mind if there was to be a postponement of the reports of the Examination Committee, should there not also be a postponement of the report of the Education Committee? But he would point out to members of the Council that if this postponement did take place it meant a considerable expense.

Mr. TOMES: Can you tell us what the probable expense will be?

The PRESIDENT: It depends on the number of days the Council sits. It is something between £150 and £200 a day; that you may take as a fair average.

Mr. ALLEN (Registrar): £650 for a session of two days and £175 for each following day.

The PRESIDENT: What a very expensive body the Council is!

Mr. BROWN suggested that the inspectors' and visitors' reports should be received and entered on the minutes.

The PRESIDENT said he would agree to that on one condition, that the motion to receive the reports was accepted without debate.

Dr. MCVAIL objected to the reports being entered on the minutes until the Council was going to discuss them. It would be quite unfair to the representatives of the bodies concerned who should have an opportunity of making a reply.

Mr. BRYANT then formally moved the proposal standing in his name:—

That the consideration by the Council of the inspectors' and visitors' reports, and of the reports on these by the Examination Committee, be postponed until July 23th, when a special meeting of Council shall be held for the purpose of taking them into consideration.

He said he merely brought forward the motion as the mouthpiece of the committee but his own opinion was the other way.

Dr. MCVAIL, in seconding the motion, said that it was the unanimous finding of the committee with the exception of Mr. Bryant who expressed an opinion neither way.

Sir WILLIAM THOMSON said he was not in favour of the motion and he was a member of the Examination Committee.

Dr. MCVAIL said the Examination Committee had sat that week 12½ hours and it was, perhaps, the most arduous work the members of the committee had ever been engaged in. Very full consideration was given by the committee to every one of the reports and the serious question which the members of the committee had to consider was whether they should agree or disagree with the opinions expressed in these reports. What the committee felt was this: could the members of the Council do justice to these reports without having them in their hands for consideration for two or three weeks? The Council had taken four and a half days for the penal work. Were they to grudge the money necessary for carrying on what was really the most important business of the Council? If it was right that they should postpone the reports the question of expense should not stand in the way. He understood there were certain important members of the Council, including the President, who could not be there after Saturday and he was sure they would all agree with him that to consider these important reports without the President would be wrong.

Sir WILLIAM THOMSON opposed the motion. It would be very inconvenient to many members of the Council to return to London in July for a special session. The matters dealt with in the reports of the Examination and Education Committees were very important to the colleges and conjoint bodies concerned and it was an exceedingly unpleasant thing for these bodies to have the reports talked about and the effect of them leaking out. He thought it would be much better that the Council should come face to face with these bodies without further delay. They had been dangling over the business for five or six years and at last when they had got to a definite point they were met by a motion for postponement until next July or November. He submitted that as the Council was now in session it would be far better to go on for two or three days longer rather than face again the great inconvenience of a special session in two months' time.

Dr. WINDLE said he should have preferred to go on with the work but the President had intimated that it was impossible for him to be present after Saturday. This was a matter of such great importance that the Council ought to have the President in the chair when it was being discussed. That was his sole objection to proceeding with the business this session, but he hoped the Council would meet at the earliest possible date. This matter had been hanging in the air for nearly 12 months. All sorts of remarks had been made about it in the medical journals and it was not fair that that sort of thing should be carried on for another six months.

Sir C. NIXON and Dr. NORMAN MOORE supported the motion for postponement.

Dr. PYE-SMITH protested against the proposal to have a special meeting for the consideration of the reports. He should have thought that the state of their finances was quite sufficient to show how unjustifiable was the motion. The expense ought to be seriously considered. He held that the Council had no right to spend what, after all, was other people's money. They had spent at the present meeting an enormous sum of money with small fruits. There was nothing very urgent in the reports of the Examination Committee and they could quite well be postponed for a little longer. A special session in July would probably end in a fiasco, as was the case on a former occasion when a special meeting of the Council was held. He moved as an amendment that the reports be postponed till the next ordinary session in November.

Dr. LITTLE seconded this amendment.

Dr. MCVAIL hoped the Council would not agree to the amendment. The representatives of the bodies concerned should have the right of discussing the reports and the observations of the committee upon them at the earliest moment, if they desired it. It was entirely in consideration of their position that he seconded Mr. Bryant's motion for a postponement to an early date. He totally differed from Dr. Pye-Smith in describing a previous special meeting of the Council as a "fiasco" and said that that style of argument was not likely to insure that members of the committees would devote such earnest and close attention to the matters that came before them as had hitherto been the case.

Dr. BRUCE said that to have a special meeting within three months of the ordinary session in November was, on the face of it, acting the part of spendthrifts. He believed that no harm would follow from the postponement till November. The difficulty of settling any date for a special meeting would be very great. Whatever date was fixed it might not be convenient for some members.

Dr. FINLAY suggested that Mr. Bryant should withdraw his motion.

Sir VICTOR HORSLEY hoped that the Council would not be guided by the question of expense in deciding whether there should be a special meeting. They would have a full programme in November and to postpone all this mass of material till then would greatly overload the next ordinary session. The mere question of travelling expenses was a small item compared with the important work which the Council had got to do. He therefore hoped the Council would agree to have a meeting some time in July.

Dr. PAYNE said that he should not be sorry if the matter was delayed till November. The body which he represented was not at all anxious to bring the matter to a crisis.

Mr. BROWN suggested that the Council should adjourn that evening and meet again on June 3rd or 4th.

On a show of hands Dr. Pye-Smith's amendment to postpone consideration of the reports till the ordinary session in November was rejected by 13 votes to 11.

Mr. BRYANT informed the Council that the reports of the Examination Committee on the inspection of the final examinations of the Universities of Cambridge, Durham, and Victoria were ready and could be dealt with by the Council before the adjournment.

On the motion of Dr. MACALISTER, Mr. Bryant's motion was then amended by omitting the date "July 28th" and adding the words "other than the reports of the Cambridge, Durham, and Victoria Universities."

A good deal of discussion ensued as to the most convenient date for the special session. Various dates in July were mentioned.

Dr. NORMAN MOORE proposed and Dr. BRUCE seconded that the next ordinary session should be held on Oct. 26th, but this did not find much favour among the members and it was stoutly opposed by Dr. MCVAIL who denounced the proposal as a "manœuvre" on the part of those who objected to any special meeting.

It was ultimately decided that the special meeting should be held on July 15th and Mr. Bryant's motion was carried with the insertion of this date.

It was further resolved to postpone the consideration of the report of the Education Committee to the same special meeting.

Final Examinations.

Dr. MACALISTER thought that though consideration was postponed it would be advisable at once to place on the minutes the reports from the Examination Committee on the inspection of the final examination of the Universities of Durham, Victoria, and Cambridge and also those respecting the Universities of London and Oxford and the Conjoint Board in England.

Sir VICTOR HORSLEY supported this view and the Council agreed.

Extracts from these reports follow :—

CAMBRIDGE UNIVERSITY.

There is no examination in forensic medicine, nor examiners. There was only one question set in hygiene and there was no oral or practical examination in that subject, or any special examiner. The examination in surgery was pronounced by the inspector to be excellent. The surgical examination was upon the whole a very thorough one and possessed some features which are well worthy of close consideration. The examination in midwifery and diseases of women is described by the inspector as being in every way a satisfactory one. The inspector noted that the standard of the examinations in Part I. and Part II. was a high one and that they were well and carefully conducted. In his opinion the final examinations for the degree of M.B. are "sufficient." The Council of the Senate expresses its satisfaction at the favourable report of the inspector and state that the attention of the examiners shall be directed to the suggestions which he has made with regard to certain details. This committee considers the examination as being of a high standard; every part of it was well thought out and skilfully conducted. It might be a source of regret that the marks obtainable for the written and oral examinations in medicine and surgery at the final examination exceed those for the clinical and practical portions of the examination, which is contrary to the recommendations of this Council. But where so much is good and in every sense praiseworthy this committee hesitates to emphasise anything that may seem to be fault-finding.

OXFORD UNIVERSITY.

It is quite impossible for the Examination Committee to compare the examination of the Oxford University with that of other universities and corporations with which it is familiar. If the Oxford scheme of general medical education is the best, that laid down by the Council must be wrong; and if the scheme of this Council is good the Oxford scheme is not one to be sanctioned. The scheme of this Council has been laid down for the general guidance of students, of universities or corporations, and it is expected that all medical students will conform to it in a general way throughout their career. In the face of the facts stated in the report of the visitor and inspector, and having regard to the opinion they express—in which this Committee entirely agrees—as to the insufficiency of the final B.M. examination of the University of Oxford, the Examination Committee considers that the authorities of the University must themselves be regarded entirely responsible for granting a registrable qualification on an insufficient examination.

UNIVERSITY OF DURHAM.

In the opinion of the visitor and inspector the examinations in medicine, surgery, and midwifery of the University of Durham, held in September, 1902, are "sufficient" and of a high standard. Candidates are not required to reside at Durham. They may spend four of the five years of professional education either at Newcastle-upon-Tyne or at one or more of the recognised medical schools, although it is essential that one of the five years should be spent in attendance at the College of Medicine at Newcastle. During the year so spent the candidate must attend at least two courses of lectures in the winter session and two in the summer session and must take part in the class and test examinations held in connexion with the classes and he must also attend medical and surgical hospital practice and clinical lectures on medicine and surgery at the Royal Infirmary. The organisation of the examination was excellent. Each part of it was conducted with marked regularity and order and with studied attention to every detail.

UNIVERSITY OF LONDON.

The visitor and inspector in their careful report on the examination for the degree of Bachelor of Medicine of the University of London came to the conclusion "that the examination in medicine and in midwifery was sufficient," but that the "examination in surgery was not such as would secure the standard of efficiency in that subject that is required by the General Medical Council."

The committee is bound to recognise the fact that the M.B. degree of the London University in its new as in its former shape is a registrable qualification and under such circumstances the Council must see that the standard of efficiency in practical medicine, surgery, and midwifery is maintained at a "sufficient" level. The committee is consequently unable to approve of any scheme of examination which tends towards the subordination of these all-important practical qualifications.

The senate informs us that the great majority of candidates for the London degree in medicine are already licentiates and at the same time accepts the criticisms of the visitor on the oral portion as just, and tells us that measures have already been taken to strengthen and to improve that part of the examination. So far good; but if the majority of the candidates for the degree are licentiates, surely such a fact should in no measure lead the examiners to lower the value of the degree of M.B. by giving marks to the practical, clinical, and oral parts of the examinations which are only half the value of the marks for a written paper and when such marks would probably not pass a candidate at another licensing body where clinical and practical work are estimated at a higher value than they appear to be at the University of London. If the degree is to be regarded as an honour degree rather than as a licence to practise, the necessity of maintaining at least as high a standard in the practical part of the examination as in the literary ought to be observed.

VICTORIA UNIVERSITY.

The Victoria University when the inspection was made was still composed of three colleges, as it was in 1895 when last visited and inspected—Owens College of Manchester, University College of Liverpool, and Yorkshire College of Leeds. The final examinations held in July, 1902, are at present practically the same as those which were in force in 1895 and candidates may now either present themselves in all six subjects of examination on the same occasion or may pass the examination in two parts. The written portion of the examination occupied four days, the clinical, practical, and oral nine days, the meeting of the examiners to determine the results of the examinations having in addition a day to itself.

The visitor and inspector read some of the answer books in different subjects of several candidates from each of the colleges. The majority of the answers were good and were well expressed and neatly written; errors in spelling were noticed in one paper only. Ample time was allowed for answering the questions. The clinical examinations were well arranged and abundant material was provided not only from the wards of the different hospitals but from outside sources. The clinical examination as a whole was pronounced by the visitor and inspector as most satisfactory and all the arrangements worked perfectly. It was evident that the examiners required a high standard of proficiency; 25 of the 38 Owens College candidates (64 per cent.) obtained 50 per cent., or over, of the marks for clinical medicine. The clinical surgery examination was pronounced to be excellent. The examination in practical surgery was comprehensive and thorough.

The examination in obstetrics and diseases of women, in morbid anatomy, in pharmacology and therapeutics, is in every way excellent, but the committee agrees with the visitor and inspector that the limitation of examination in the subject of forensic medicine to toxicology is to be regretted. The Examination Committee is well pleased with the report of the visitor and inspector of this University, who describe the examination as "sufficient" and of a high standard.

CONJOINT BOARD IN ENGLAND.

The observations received are solely from the Council of the Royal College of Surgeons. The Royal College of Physicians states that "the criticisms and suggestions of its visitor and inspector are under consideration and will be taken into account when the regulations of the first examination next come before the College for revision."

The visitation of the Conjoint Examining Board in England was held in July and August, 1902, when there were 65 candidates for the biological part of the examination and 109 for the part on chemistry and physics. On the examination of elementary biology of the Conjoint Board the visitors point out that "it is conducted entirely by the oral method, no paper being set and no practical work required from the candidates and is not one capable of eliciting whether a candidate has been properly taught or has been crammed" and that "this is due to defects inherent in its method."

This committee agrees with the inspectors in the recommendation to add a written and practical part to the examination in biology.

The second half of the visitors' work has reference to chemistry and physics and to make the examination efficient the inspectors say it would be necessary to set three questions each in physics, inorganic chemistry, and organic chemistry and make it compulsory to answer two questions in each section. The Examination Committee approves of this recommendation.

The visitors state that the candidates were so badly prepared that a higher standard than the one used would have rejected the majority of them, but as "the minimum 50 per cent. marks required on the average of the written and practical is higher than is usual in a chemistry pass examination, the idea evidently of the examiners is to make the questions easy and to require some of them to be answered well." The visitors regard the standard as a low one. This committee concurs in this opinion. In answer to these criticisms of the visitors, the remarks contained in the reply from the Royal College of Surgeons should be considered.

According to the regulations of the Conjoint Board four complete years must be spent in medical studies after passing the examination in biology, chemistry, and physics, as well as five complete years of medical study from the date of the preliminary examination in arts. The purpose of the preliminary examination now under review "is the testing of such knowledge of chemistry, physics, and biology as a student may acquire in proper laboratories and under sound teachers in the first year of his medical studies." Under the present five years' curriculum, a much longer period of study for the large majority of students than one year is often occupied in acquiring and passing these preliminary subjects. During the year 1901 only 30 students completed their examination at the Conjoint Board at the end of five years, whilst 139 spent between five and six years, and the 214 remainder spent more than six years in medical studies.

The committee reports its agreement with the opinion of the

visitors that as regards biology, "the examination is not one capable of eliciting whether a candidate has been properly taught or has been crammed"; it also agrees that as regards the curriculum of the Colleges "the standard exacted is apparently as high as can be obtained from candidates so imperfectly trained." Concerning chemistry and physics the committee agrees with the visitors that "the standard is a low one"; and that "the main portion of the practical examination is empirical and not scientific, and is no test either of sound principles or of practical efficiency."

Returns from Teaching Institutions.

On the motion of Sir VICTOR HORSLEY, seconded by Sir JOHN BATTY TUKE, there was also formally received and entered on the minutes a report by the Education Committee on the returns supplied by the Examining Board in England pursuant to a request made by the General Medical Council in a resolution passed on Feb. 26th, 1902, showing the answers given by the teaching institutions recognised by the Royal Colleges of Physicians and Surgeons in London, but not approved by the General Medical Council, regarding the courses of study in chemistry, physics, and biology to be gone through by candidates for the qualifications L.R.C.P. Lond. and M.R.C.S. Eng., with remarks by the Education Committee. These remarks were summarised in the following way:—

From the statistics presented to and analysed by the committee two important facts emerge which the committee think worthy of special emphasis:—

I. The Royal Colleges of England do not demand, as an essential for admission to their professional examination in chemistry, physics, and biology, that any certified course of instruction in these subjects should be taken subsequent to the preliminary examination in general knowledge. It is understood that at some period the student has studied these subjects in a recognised school, but he may present himself for examination in them immediately after passing the preliminary examination, and the licensing body relies, for evidence of his knowledge, solely upon the results of its own examination.

II. In cases where the whole time spent upon these three subjects is antecedent to the date of the preliminary examination in general knowledge the licensing body does not permit the prescribed five years' curriculum in medical study to be curtailed thereby. All students are required subsequent to the preliminary examination to devote five years to medical study. But on the other hand a student whose course of study in chemistry, physics, and biology is taken out subsequent to the date of his preliminary examination is permitted to count, as part of the necessary five years, any period from three months to one year spent in one of the recognised schools, provided that during the period specified—three, six, or nine months, as the case may be—he engages in study in one, two, or all of the subjects mentioned. In the majority of the recognised institutions biology is not taught and as a consequence the student who spends a portion of his first year of medical study in one of these schools in most instances confines his professional work to chemistry and physics and very frequently takes these subjects in conjunction with others which form part of the ordinary school curriculum. In most of the schools the course of instruction followed in chemistry and physics is less than 15 hours a week; in many it is very much less. And it is evident from the statistics presented that in some of the cases it is actually possible for six months of medical study to be constituted by a course of instruction in chemistry and physics, limited so far as these subjects are concerned to four or five hours a week and taken out at an ordinary grammar school during school hours, or at a technical institute, it may be in its evening classes.

Note by Dr. Norman Moore on the returns:—It should be observed that the principle generally adopted in the recognition of institutions by the Conjoint Board has been that where the laboratories and appliances are satisfactory and the teachers efficient, the syllabus and examination of the Board will, in chemistry, physics, and biology, be sufficient to regulate the course of study.

The Pharmacopœia.

At the request of Dr. MACALISTER, who said that he had nothing to add, the following report was received and entered on the minutes:—

The Pharmacopœia Committee beg leave to report that up to the present date 33,880 copies of the British Pharmacopœia, 1898, and 541 copies of the Indian and Colonial Addendum, 1900, have been disposed of.

As the issue of 1500 copies of the Pharmacopœia ordered by the President in July of last year was nearly exhausted by the end of March it became necessary to direct the printers to prepare a further supply. On inquiry it appeared that an appreciable saving would be effected if a larger issue than 1500 were printed and the President accordingly, after consultation with the chairman of the committee, gave orders for an issue of 3000 copies. This supply should, at the present rate of sale, suffice for two years or more. The committee recommend that the action taken in the matter be approved by the Council.

The committee have received an interim report on the Pharmacopœial tests for arsenium from Professor W. R. Dunstan, F.R.S., who has undertaken to investigate for the committee certain important questions bearing on this subject. The investigations are being made under Professor Dunstan's direction in the laboratories of the Imperial Institute. As the inquiry involves a large amount of laborious work the committee propose, with the approval of the Council, to make a grant towards the necessary expense involved.

The first instalment of a digest of criticisms and researches bearing on the revision of the Pharmacopœia, prepared for the committee by Mr. William Chattaway of the Society of Apothecaries, has just been received and the remainder will be ready in a short time. This digest will be of great service in suggesting the directions in which further investigation may be necessary before the preparation of the next Pharmacopœia is undertaken.

Notice has been received of the resignation of Mr. Charles Ekin, who, with Dr. W. Inglis Clark, has since 1899 represented the Pharmaceutical Society of Great Britain in the conference with members of the committee which was sanctioned by the Council on Nov. 30th, 1898. The committee desire to record their thanks to Mr. Ekin for his services in this connexion.

Gifts of books and pamphlets for the library have been received from Professor H. C. Wood, Dr. Payne, Dr. Power, and the chairman.

Dr. MACALISTER, in answer to Mr. BROWN, said that in respect to Dr. Inglis Clark the matter rested with the Pharmaceutical Society.

Mr. BROWN: I should like to propose that it is not necessary that the vacancy should be filled. I have reasons for that.

Dr. MACALISTER: I think you should leave the Pharmaceutical Society to mind its own business.

Application for Registration.

A report was submitted from the English Branch Council recommending that an application for registration by Mr. William Bennett Rule, Mem. R. Coll. Surg. Eng., 1866, Lic. R. Coll. Phys. Edin., 1867, a medical practitioner entitled to be registered under the Medical Act (1858), but who neglected to effect such registration until after the "appointed day" (June 30th, 1887), under the Medical Act (1886) should be granted.

On the motion of Dr. MACALISTER, seconded by Mr. BRYANT, the recommendation was adopted and the Registrar was directed to place Mr. Rule's name upon the Medical Register.

Committees of Council.

Committees as follows were appointed:—

Pharmacopœia Committee.—Dr. Norman Moore, Sir George Philipson, Dr. Payne, Dr. MacAlister, Sir John Tuke, Dr. McVail, Dr. Atthill, and Mr. Tichborne.

Finance Committee.—Dr. Pye-Smith, Mr. Bryant, Dr. Heron Watson, Dr. Bennett, and Mr. Tomes.

Dental Committee.—The President (Chairman), Mr. Bryant, Dr. Heron Watson, Mr. Tomes, and Sir Charles Ball.

Dental Education and Examination Committee.—Mr. Bryant, Mr. Brown, Mr. Tomes, Dr. Finlay, Sir Charles Ball, Dr. Lindsay Steven, and Dr. Bennett.

Students' Registration Committee.—Sir Hugh Beevor, Dr. MacAlister, Sir John Tuke, Dr. Mackay, Dr. Bennett, and Sir William Thomson.

Examination Committee.—Nominated by the English Branch Council: Mr. Bryant, Mr. Young, and Dr. Payne; by the Scottish Branch Council: Dr. Heron Watson, Dr. McVail, and Dr. Finlay; and by the Irish Branch Council: Sir Charles Ball, Dr. Little, and Sir William Thomson.

Education Committee.—Nominated by the English Branch Council: Dr. Norman Moore, Dr. MacAlister, and Dr. Windle; by the Scottish Branch Council: Sir John Tuke, Dr. Mackay, and Dr. McCall Anderson; and by the Irish Branch Council: Sir C. Nixon, Dr. Bennett, and Sir William Thomson.

Public Health Committee.—Nominated by the English Branch Council: Mr. Power, Mr. Jackson, and Sir G. Philipson; by the Scottish Branch Council: Dr. Bruce, Dr. McVail, and Dr. Lindsay Steven; and by the Irish Branch Council: Sir Charles Ball, Mr. Tichborne, and Dr. Bennett.

Public Health Committee.

On the motion of Dr. BRUCE, seconded by Sir CHARLES BALL, a report from the Public Health Committee, from which the following are extracts, was received and entered on the minutes:—

1. The committee considered a communication from the Director-General of the Army Medical Department giving particulars of the proposed military sanitary districts, with their approximate populations. After due consideration, the committee agreed to recommend the Council to recognise on the present occasion the following districts, viz.:—Aldershot, Salisbury Plain, Southern and Western Districts, Dublin and Cork Districts; Chatham, Home, and Eastern Districts; North-Eastern and North-Western Districts, Scottish District, and Gibraltar, as meeting the requirements of the Council in accordance with Rule 3.

2. The committee had submitted to them a letter dated 16th May, 1903, from the Clerk of the Metropolitan Asylums Board, inclosing a resolution of that body in regard to the attendance at fever hospitals of candidates for diplomas in public health in accordance with Rule 4. The committee consider that this scheme meets in the fullest manner the rules and requirements of the Council for diplomas in public health. The committee suggest that the Council should express gratification that the Metropolitan Asylums Board has seen its way to afford to students preparing for public health diplomas such ample opportunities for complying with the Council's requirements.

It was agreed to adopt Part 1 and that the military

districts there recommended be the recognised military sanitary districts.

In moving the adoption of Part 2, Dr. BRUCE said that the Clerk to the Metropolitan Asylums Board was very anxious to meet the wishes of the Council in this matter. He had given every opportunity to secure inspection of diseases and if the Council approved of this report he thought they should express their thanks to the Metropolitan Asylums Board for allowing such opportunities as it was giving for the study of sanitary science.

Dr. NORMAN MOORE seconded the proposal which was agreed to.

The PRESIDENT: We shall see that a letter is duly sent to the Board.

The Council adjourned.

WE have received a letter from Mr. Henry Varley complaining of our publication of the reference made at the General Medical Council to certain pamphlets written by him and addressed to young men. We made no comment on the proceedings, but, although we do not impute improper motives to Mr. Varley, we must say, having read his pamphlets, that they are not fitting works to be retailed to anyone who likes to buy them for 6*d.* or 3*d.*—ED. L.

Medical News.

THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed the first professional examination for the Fellowship at the half-yearly meeting of the examiners in May:—

James Elrick Adler, London Hospital; James Vere Arkle, M.R.C.S. Eng., L.R.C.P. Lond., New Zealand University, and St. Thomas's Hospital; Ivor Gordon Back, B.A. Camb., Cambridge University and St. George's Hospital; William Girling Ball and Rowland Alessandro Bowling, St. Bartholomew's Hospital; John Davis Barris, B.A. Camb., Cambridge University, and King's College, London; Albert Ogier Bisson, Lausanne University and London Hospital; Laurence Henry Burner, Guy's Hospital; Thomas Charles Clare and Joseph Bernard Dawson, Birmingham University; George Coates, M.D. Glas., Glasgow University and King's College, London; James Douglas Cooke, M.B., B.S. Melb., Melbourne University and London Hospital; Vincent Zachary Cope, St. Mary's Hospital; Claude Harold Cross and Reginald Cheyne Elmslie, M.B., B.S. Lond., M.R.C.S. Eng., L.R.C.P. Lond., St. Bartholomew's Hospital; John Dundon, M.B.R.U. Irel., F.R.C.S. Irel., Queen's College, Cork; Watts Edmondson, Yorkshire College, Leeds; Thomas John Carey Evans, St. Mungo's College, Glasgow; Robert James Ferguson, M.D., M.Ch. R.U.I., Queen's College, Belfast, and King's College, London; Ethelbert Rest Flint, Yorkshire College, Leeds, and Owens College, Manchester; Herbert George Frankling, M.R.C.S. Eng., L.R.C.P. Lond., London Hospital and King's College, London; John Gay French, M.B. Lond., M.R.C.S. Eng., L.R.C.P. Lond., St. Mary's Hospital; James Glenny Gibb and Reginald Jamison, St. Bartholomew's Hospital; Robert Francis Hebbert, St. Thomas's Hospital; Cyril Arthur Bennett Horsford, M.D., Ch.B. Edin., Edinburgh University and King's College, London; Robert Rutson James, St. George's Hospital; Alfred Gwilym Jones, Guy's Hospital; Robert Ernest Kelly, M.B., Ch.B., B.Sc. Vict., University College, Liverpool; Charles Killick, M.B., B.C. Camb., M.R.C.S. Eng., L.R.C.P. Lond., Cambridge University and St. Mary's Hospital; William Broad Kirkaldy, M.D., C.M. Edin., and Angus McNab, M.B., Ch.B., B.Sc. Edin., Edinburgh University and King's College, London; James Wilson McIntosh, M.B., Ch.B., B.Sc. Edin., Edinburgh University and London Hospital; Clarence Basil McNeile, Middlesex Hospital; John Clarke Mead, St. Bartholomew's Hospital; John Theodore Macnab, B.A. Camb., and Echlin Storry Molyneux, London Hospital; Leonard Noon, M.A., B.C. Camb., Cambridge University and St. Bartholomew's Hospital; Miles Harris Phillips, M.B. Lond., M.R.C.S. Eng., L.R.C.P. Lond., and Wilfrid James Hussey Pinniger, University College, Bristol, and King's College, London; James Alexander Roberts, M.B. Toronto; University of Toronto and King's College, London; Frank Atcherley Rose, M.A., M.B., B.C. Camb., M.R.C.S. Eng., Cambridge University and St. Bartholomew's Hospital; Frederic William Forbes Ross, M.D., C.M. Ed., M.R.C.S. Eng., L.R.C.P. Lond., Edinburgh University and University College, London; Cecil William Rowntree, M.B. Lond., M.R.C.S. Eng., L.R.C.P. Lond., Middlesex Hospital; Wallace Arthur Scott, M.B. Toronto, M.R.C.S. Eng., L.R.C.P. Lond., Toronto University, University and King's Colleges, London; George Stanley Thompson, St. Mary's Hospital; Charles Ferrier Walters, M.R.C.S. Eng., L.R.C.P. Lond., University College, Bristol, and King's College, London; Albert James Walton, London Hospital; and Philip Roscoe Wrigley, M.R.C.S. Eng., L.R.C.P. Lond., Owens College, Manchester.

128 gentlemen presented themselves for this examination, of whom 49 passed and 79 were referred.

UNIVERSITY OF CAMBRIDGE.—The following medical degrees were conferred on May 28th:—

Doctor of Medicine.—S. H. Long, Gonville and Caius.
Bachelor of Medicine and Bachelor of Surgery.—J. McBryde, King's; F. H. Pearce, Trinity; W. H. Brailey, Queen's; H. T. Thompson, Christ's; and G. W. Greene, Downing.
Bachelor of Medicine.—H. W. Atkinson and R. F. Williams, Gonville and Caius.
Bachelor of Surgery.—F. S. Kidd and J. E. Spicer, Trinity; J. E. Frere, Pembroke; H. Statham, Christ's; and W. B. Crowfoot, Emmanuel.

The graces for the re-establishment of the professorship of surgery will come before the Senate on June 11th.

ROYAL BRITISH NURSES' ASSOCIATION.—Her Royal Highness Princess Christian will preside at the annual meeting of the Royal British Nurses' Association to be held at the Imperial Institute on Saturday, June 6th, at 3.30 P.M.

TENBY.—A large section of the British Medical Association will this year visit the town of Tenby in Pembrokeshire. We are asked to mention the fact that an illustrated souvenir of the town can be obtained gratis and post free upon application to the Secretary of the Improvement Association, Tenby. The guide contains nearly 50 full-page photographic pictures of Tenby and its environs, whilst the descriptive matter is contributed by Dr. D. A. Reid, the borough medical officer of health.

MEDICAL GOLF TOURNAMENT.—The sixth annual tournament was held on May 28th on the links of the Hanger Hill Golf Club, to which club thanks are due for its courteous hospitality. There was a large entry in both classes and scoring would have been better but for a heavy thunderstorm bursting over the links accompanied by torrents of rain which flooded some of the greens. The results were as follows:—First class: First prize, Mr. Rolf Creasy, two down to bogey; second prize, tied for at three down by Dr. Vassie and Dr. Maclaren; best last nine holes, Dr. James Taylor with the good score of two up. Second class: Resulted in a tie at four down between Dr. Gordon Watson, Dr. Alderson, and Dr. Schofield; best last nine holes, Dr. Schofield with all square. A keenly contested foursome competition *v.* bogey was won by Dr. Seymour Taylor and Dr. Lyle with the fine score of two down.

CHELSEA CLINICAL SOCIETY.—Dr. C. C. Gibbes, the President of the society, took the chair at the annual dinner of the society, which was held at the Holborn Restaurant on May 26th. In the course of proposing the toast of "The Chelsea Clinical Society" the President traced the origin and rise of the society and congratulated the members on the continued success of their annual debates. He ascribed the satisfactory condition of the society to the fact that what he called subjects of a "high falutin'" character were severely left to be dealt with by the societies which assembled at 20, Hanover-square, and which favoured topics of a high and mighty, but extremely dry, kind. The members of the Chelsea Clinical Society were ordinary mortals and supported their society because it not only afforded them help by means of the papers read at their meetings, but it also enabled them to make a determined stand against any encroachment on their rights.—Dr. T. V. Dickinson, the president-elect, responded to the toast, which was followed by that of "Kindred Societies," proposed by Dr. W. Ewart and replied to by Dr. W. Hale White and Dr. G. Herschell. The toast of "The Visitors" was intrusted to Mr J. F. Palmer and acknowledged by Dr. Hector W. G. Mackenzie and Dr. T. B. Hyslop.—Mr. C. A. Morris proposed "The President" and Mr. Noble Smith "The Officers of the Society," to which the officers concerned responded.

Parliamentary Intelligence.

HOUSE OF COMMONS.

THURSDAY, MAY 28TH.

The Infected Blankets.

Dr. FARQUHARSON asked the Secretary of State for War whether, in view of the scientific questions raised by the recent outbreak of fever on the *Cornwall* attributed to the use of infected blankets, he would cause an inquiry into the matter to be conducted either by the officers of the Royal Army Medical Corps or in conjunction with the medical staff of the Local Government Board.—Mr. BRODRICK: I shall not be in a position to reply to any further questions on the subject of these blankets until I am in possession of the report from the general officer commanding in South Africa which has been called for.

Mr. YOXALL asked the President of the Local Government Board if he was aware that two consignments of army blankets infected with typhoid germs reached the city of Nottingham; that, although the

health committee of the city took steps to prevent the further distribution of these blankets, some portions of the consignments in question had already been sold and distributed to villages in the neighbourhood; and, if so, whether he would state what steps he was taking in the matter.—Mr. LONG: I have communicated with the town clerk of Nottingham on the subject, who has informed me this morning that, in consequence of the action taken by the medical officer of health in notifying the persons in the villages referred to who had purchased the blankets, the whole of these articles have been sent back to the firm at Nottingham who supplied them. The town clerk adds that all the blankets which reached Nottingham, some hundreds in number, are in process of disinfection.

Outbreak of Ophthalmia.

Mr. HERBERT SAMUEL asked the President of the Local Government Board whether he was aware that an outbreak of ophthalmia at the Hanwell Poor-law schools had affected 230 children between April 4th and May 16th of this year; whether he had any official reports showing that this outbreak had been due to the return of partially cured children from the ophthalmic school to the main school; and, if so, whether he would state what steps had been taken in the matter.—Mr. LONG: I am aware of the outbreak which has recently occurred at the schools referred to. The managers obtained the services of Mr. Sydney Stephenson and I have seen a report by him on the subject. It appears that the outbreak was a mild form of conjunctivitis or "blight." This is an ailment which is very prevalent among children and which readily yields to suitable treatment. I am not aware of any report to show that the outbreak was due to the cause referred to in the question. Indeed, the evidence indicates that the infection was introduced into the schools by a child recently admitted from Southwark. I am informed that the managers re-opened a portion of the former ophthalmic school for the reception of the children affected, and I understand that the action which they have taken on the advice of Mr. Stephenson is being attended with success. Only 60 of the children now remain isolated and under treatment.

Epidemics in a Poor-law School.

Mr. HERBERT SAMUEL asked the President of the Local Government Board during how many weeks in the past 12 months there had been epidemics of illness in the Hanwell Poor-law schools.—Mr. LONG: It appears from a return which I have received from the clerk to the managers that during the year ended Saturday last there have been three slight epidemics of illness at these schools. Thus, there were 59 cases of influenza during nine weeks, 43 cases of chicken-pox during 12 weeks, and 26 cases of whooping-cough during 10 weeks. The total number of cases of all other diseases for the year is nine. During 13 weeks there was no case of disease in the schools. I am informed that there have been no deaths there since June, 1901. This reply does not take account of the mild attack of "blight" which had recently occurred in the schools.

Poor-law Nursing.

Mr. TALBOT asked the President of the Local Government Board whether he had taken into consideration the Report of the departmental committee on Poor-law Nursing, dated Nov. 10th, 1902, and whether it was still his intention to recommend the training of a class of qualified nurses in the smaller workhouses.—Mr. LONG: I can only state at present that the report referred to is under my consideration.

Royal Army Medical Corps.

Dr. E. C. THOMPSON asked the Secretary of State for India if he would explain why certain increases of pay and charge pay, granted by Royal warrant of March 28th, 1902, to officers of the Royal Army Medical Corps, and drawn all over the world since that date, were still withheld in India.—Lord GEORGE HAMILTON: The Royal warrant of March 24th, 1902, amended certain articles of the pay warrant and was therefore subject to the last clause in the preamble of the pay warrant which declares that it is not in force in the Indian empire. The question of the pay of the Royal Army Medical Corps in India has however, been under consideration, and revised rates, giving a substantial increase to the ranks of lieutenant, captain, and lieutenant-colonel, have been sanctioned with effect from Nov. 24th, 1902.

Plague in the Punjab.

Mr. WEIR asked the Secretary of State for India if he would state the number of persons who had died from plague in the Punjab since Jan. 1st last, and what percentage of these persons were inoculated with plague serum.—Lord GEORGE HAMILTON: The number of persons who have died from plague in the Punjab, the population of which is 22½ millions, between Jan. 1st, 1903, and May 2nd (the latest date for which figures have been received) is 141,789. The returns do not distinguish deaths of inoculated persons from deaths of persons not inoculated.

Plague at Hong-Kong.

Mr. WEIR asked the Secretary of State for the Colonies whether the system of inoculation with plague serum which was in force in India had been adopted in Hong-Kong and, if not, whether he would consider the expediency of calling for a report on the subject.—Mr. CHAMBERLAIN: The honourable Member will see from Dr. Simpson's report which has just been placed in the library of the House that the inoculation of those who wish to be protected with Haffkine's plague prophylactic is already carried on in Hong-Kong, and that Dr. Simpson recommends the continuance of this practice.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week, such information for gratuitous publication.*

ADAMS, J. E., L.R.C.P. Lond., M.R.C.S., has been appointed Assistant House Surgeon to St. Thomas's Hospital.

BADCOCK, C. H., B.A. Cantab., M.R.C.S., L.R.C.P. Lond., has been appointed House Surgeon to Salisbury Infirmary.

BEVAN, A., M.B. Lond., L.R.C.P. Lond., M.R.C.S., has been appointed Clinical Assistant in the Ear Department at St. Thomas's Hospital.

BIDDLE, HENRY G., M.R.C.S., L.R.C.P. Lond., has been appointed Medical Officer and Public Vaccinator for the St. Peter's District of the Isle of Thanet Union. (Corrected notice.)

BOYCOTT, A. E., M.B., B.Ch. Oxon., has been appointed House Physician to St. Thomas's Hospital.

BRADFORD, A. B., M.B., B.S. Durh., has been appointed House Surgeon to St. Thomas's Hospital.

CARPMAEL, N., L.R.C.P. Lond., M.R.C.S., has been appointed Assistant House Surgeon to St. Thomas's Hospital.

COATES, J., L.R.C.P. Lond., M.R.C.S., has been appointed Clinical Assistant in the Throat Department at St. Thomas's Hospital.

COLMAN, FRANK, L.D.S., has been appointed Dental Surgeon to the East London Hospital for Children.

DICK, G. W., L.R.C.P., L.R.C.S., Edin., has been appointed Certifying Surgeon under the Factory Act for the Shotts District of the county of Lanark.

EDWARD, A. A., M.D. Edin., has been appointed Certifying Surgeon under the Factory Act for the Haslingden District of the county of Lancaster.

GLANVILLE, W. M. G., M.B., B.Ch. Oxon., has been appointed Senior Obstetric House Physician to St. Thomas's Hospital.

GUTHRIE, T., L.R.C.P. Lond., M.R.C.S., has been appointed Clinical Assistant in the Skin Department at St. Thomas's Hospital.

HEDLEY, J. P., M.B., B.C. Cantab., has been appointed House Surgeon to St. Thomas's Hospital.

HENDERSON, T. B., M.A., M.B. Oxon., has been appointed House Surgeon to St. Thomas's Hospital.

HILDESHEIM, O., M.B., B.Ch. Oxon., has been appointed House Physician to St. Thomas's Hospital.

HUTCHINSON, J. R., M.B., Ch.B. Vict., has been appointed Junior Resident Medical Officer to the Chorlton Union Workhouse Infirmary, Withington.

IBBOTSON, W., L.R.C.P. Lond., M.R.C.S., has been appointed Clinical Assistant in the Skin Department at St. Thomas's Hospital.

JOY, C. H., M.D. Durh., has been appointed Certifying Surgeon under the Factory Act for the Tamworth District of the county of Staffs.

LEACH, R. E. H., L.R.C.P. Lond., M.R.C.S., has been appointed Clinical Assistant in the Throat Department at St. Thomas's Hospital.

MARCH, J. OGDIN, L.R.C.P. Lond., M.R.C.S., has been appointed to the Medical Charge of the troops in camp at Lechlade, Gloucestershire.

MCGILL, J. M., M.B., M.S. Edin., has been appointed Certifying Surgeon under the Factory Act for the Annbank District of the county of Ayr.

MILESTONE, EVELYN STONE, L.R.C.P. & S. Edin., M.D. Brux., has been appointed by the Education Committee, Sheffield, as Medical Officer for examining women teachers and female candidates for pupil teacherships.

PANTON, B. N., B.A. Cantab., L.R.C.P. Lond., M.R.C.S., has been appointed Assistant House Physician to St. Thomas's Hospital.

PHILIP, A., M.B., M.S. Edin., has been appointed Certifying Surgeon under the Factory Act for the Newport District of the county of Fife.

REID, W. A., L.R.C.P. & S. Edin., has been appointed Junior House Surgeon at the Clayton Hospital and Wakefield General Dispensary.

ROB, J. W., M.B., B.C. Cantab., has been appointed House Surgeon to St. Thomas's Hospital.

ROSS, E. A., M.B. Cantab., has been appointed Clinical Assistant in the Ear Department at St. Thomas's Hospital.

SEARS, C. N., L.R.C.P. Lond., M.R.C.S., has been appointed House Physician to St. Thomas's Hospital.

SERGEANT, J. N., L.R.C.P. Lond., M.R.C.S., has been appointed Assistant House Physician to St. Thomas's Hospital.

SEXTON, H. W., L.R.C.P. Lond., M.R.C.S., has been appointed House Physician to St. Thomas's Hospital.

SPURRIER, H., B.A. Cantab., L.R.C.P. Lond., M.R.C.S., has been appointed Junior Obstetric House Physician to St. Thomas's Hospital.

UPCOTT, H., L.R.C.P. Lond., M.R.C.S., has been appointed Assistant House Surgeon to St. Thomas's Hospital.

WHEEN, C., B.A. Oxon., L.R.C.P. Lond., M.R.C.S., has been appointed Assistant House Surgeon to St. Thomas's Hospital.

WOOD, W. W., M.B., M.S. Edin., has been appointed Certifying Surgeon under the Factory Act for the Grangemouth District of the county of Stirling.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

ARMY MEDICAL SERVICE.—Examination of Candidates for not less than 30 Commissions in the Royal Army Medical Corps.

BATH, ROYAL UNITED HOSPITAL.—House Surgeon. Salary £80 per annum, with board, lodging, and washing.

BRECKNOCK COUNTY AND BOROUGH INFIRMARY.—Resident House Surgeon, unmarried. Salary £100 per annum, with apartments, board, attendance, fire, and gas.

BRISTOL GENERAL HOSPITAL.—Surgeon, also Assistant Surgeon.

CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray's Inn-road, W.C.—House Surgeon. Salary at rate of £50 per annum, with board and residence.

CHESTER GENERAL INFIRMARY.—House Physician. Salary £90 per annum, with residence and maintenance.

CROYDON, COUNTY BOROUGH OF, MENTAL HOSPITAL, Warlingham, Surrey.—Senior Assistant Medical Officer. Salary £160 per annum, rising to £180, with apartments, board, and washing.

DUDLEY GUEST HOSPITAL.—Assistant House Surgeon, for six months. Salary £40 per annum, with residence, board, and washing.

EVELINA HOSPITAL FOR CHILDREN, Southwark, S.E.—Four Clinical Assistants.

GREAT NORTHERN CENTRAL HOSPITAL, Holloway, N.—Senior House Surgeon, Senior House Physician, and two Junior House Surgeons, each for six months. Salary of Seniors at rate of £60 per annum, of Juniors at £30 per annum, with board, lodging, and washing.

HARRIS, PARISH OF.—Medical Officer and Public Vaccinator. Salary £110.

HOLLOWAY SANATORIUM HOSPITAL FOR THE INSANE, Virginia Water, Surrey.—Junior Assistant Medical Officer. Salary £175 per annum, with board, lodging, and attendance.

HOSPITAL FOR SICK CHILDREN, Great Ormond-street, London, W.C.—Assistant Surgeon.

ISLE OF WIGHT COUNTY HOSPITAL, Ryde.—Resident House Surgeon. Salary £90 per annum.

KENT AND CANTERBURY HOSPITAL.—House Surgeon, unmarried. Salary £90 a year, with board and lodging.

KENT COUNTY OPHTHALMIC HOSPITAL, Maidstone.—Surgeon.

KING'S COLLEGE, London.—Senior Demonstrator in State Medicine Laboratories.

LANCASHIRE COUNTY ASYLUM, Winwick, Warrington.—Assistant Medical Officer, unmarried. Salary £150 per annum, increasing to £350, with apartments, board, attendance, and washing.

LEICESTER INFIRMARY.—Assistant House Surgeon. Salary £80 per annum, with board, apartment, and washing.

LIVERPOOL STANLEY HOSPITAL.—Third House Surgeon. Salary £70 per annum, with board, residence, and washing.

LONDON COUNTY COUNCIL.—Assistant to the Pathologist of the London County Asylums. Salary £250 per annum.

LONDON HOSPITAL MEDICAL COLLEGE.—Lectureship on Biology. Salary £100 a year and class fees. Also Demonstrator of Chemical Physiology. Salary £200.

LONDON HOSPITAL, Whitechapel, E.—Obstetric Physician.

MANCHESTER, MONSALL FEVER HOSPITAL.—Fourth Medical Assistant. Salary £100 per annum, with board, lodging, and washing.

NEWCASTLE-ON-TYNE ROYAL INFIRMARY.—Two Medical Registrars.

NORFOLK AND NORWICH HOSPITAL.—House Physician, unmarried. Salary £80 per annum, with board, lodging, and washing.

NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney-road, Bethnal Green, E.—House Surgeon for six months. Salary at rate of £80 per annum, with board, residence, and laundry.

ROYAL DENTAL HOSPITAL OF LONDON.—Two House Anæsthetists. Honorarium £50 per annum.

ROYAL HOSPITAL FOR CHILDREN AND WOMEN, Waterloo Bridge-road, S.E.—Resident Medical Officer. Salary at rate of £70 per annum.

ST. MARY'S HOSPITAL MEDICAL SCHOOL, Paddington, W.—Lecturer on Physiology. Salary £300 per annum.

ST. MARYLEBONE GENERAL DISPENSARY, 77, Welbeck-street, Cavendish-square.—Honorary Obstetric Physician.

SHEFFIELD ROYAL HOSPITAL.—Junior Assistant House Surgeon, unmarried. Salary £50, with board, washing, and apartments.

WARRINGTON INFIRMARY AND DISPENSARY.—Senior Resident House Surgeon, unmarried. Salary £120 per annum, with residence and board.

WEST BROMWICH DISTRICT HOSPITAL.—Resident Junior House Surgeon. Salary £50 per annum, with board, lodging, washing, and attendance.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.—House Surgeon. Salary £100 per annum, with board, lodging, and washing.

Births, Marriages, and Deaths.

BIRTHS.

BAYLIS.—On May 26th, at Broadclyst, Ray Park-avenue, Maidenhead, the wife of H. E. Montgomery Baylis, M.B., B.S. Durh., of a son.

DOBIE.—On May 30th, at Hunter-street, Chester, the wife of W. Henry Dobie, M.B. Edin., M.R.C.S., of a daughter.

PRITCHARD.—On May 29th, at Cromwell-place, South Kensington, the wife of Eric Pritchard, M.D. Lond., of a son.

WALLER.—On May 25th, at Thorneybrook, Chelmsford, the wife of Theodore Harry Waller, M.R.C.S., L.R.C.P. Lond. of a son.

MARRIAGE.

WEATHERBE—THURGARLAND.—On the 3rd June, 1903, at the parish church, Rotherham, by the Rev. J. W. Goodall, vicar, Dr. Lewis Johnstone Weatherbe of Ivy Lodge, Masboro', Yorks, to Ethel Louise, second daughter of Mr. Godfrey J. Thurgarland of Rotherham.

DEATHS.

FORD.—On January 23rd, at 5, St. Leonard's-road, Surbiton, Joseph Ford, M.R.C.S., L.S.A., late of Wedmore, Somerset, aged 74.

HAVILAND.—On May 30th, at his residence, Ridgemount, Frimley Green, after two and a half years' illness, most patiently borne, Alfred Haviland, M.R.C.S. Eng., aged 78. No flowers, by request.

SPRIGGE.—On May 30th, at 6, Prince of Wales-terrace, W., aged 26, Mary Ada Beatrice, second daughter of the Hon. Charles Moss, Chief Justice of Ontario, and wife of S. Squire Sprigge, M.B., of Kensington and Farnham Royal, Bucks.

WRIGHT.—On May 25th, Percy Phillips Wright, L.R.C.P. Lond., of 12, Tollington-park, London, N., aged 39. R.I.P.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births Marriages, and Deaths.

Notes, Short Comments, and Answers to Correspondents.

MEDICAL LEGISLATION IN THE ABRAHAMIC ERA.

CONTROVERSIES regarding the origin, authorship, and date of the Mosaic code have prevailed for 100 years and have within the last few months been revived in an intense form in consequence of archæological discoveries made by M. de Morgan at Susa in the end of 1901 and beginning of 1902. Interest at present centres in the inscription contained on a pillar of black diorite about eight feet high and consisting chiefly of a code of laws made by a Babylonian monarch whose name is variously transliterated as Hammurabi or Khammurabi and whose date is assigned to about 2200 B.C. On the publication, in France, of a photographic reproduction and a translation biblical critics immediately called attention to remarkable similarities in the codes ascribed respectively to Hammurabi and to Moses, the latter of whom is usually considered to have been born between 1600 and 1500 B.C. The discussions growing out of this circumstance will no doubt continue to occupy scholars for many years, but we do not propose to do more than refer to the clauses affecting medical practitioners as quoted on pp. 45-47 of the version by Mr. C. H. W. Johns (The Oldest Code of Laws in the World: the Code of Laws promulgated by Hammurabi, King of Babylon, B.C. 2285-2242. Translated by C. H. W. Johns, M.A., Lecturer in Assyriology, Queen's College, Cambridge. Edinburgh: T. and T. Clark. London: Simpkin, Marshall, and Co. 1903. Pp. 88. Price 1s. 6d.) and in the *Deutsche Medicinische Wochenschrift* of May 21st. The code consists of 282 clauses, those relative to practitioners of human and veterinary surgery being numbered 215 to 225. Scales of fees are authorised for surgical operations both on man and on domestic animals and a terrible fate was in store for the operator in the event of the human patient either dying or losing an eye. Ophthalmic surgeons must have been greatly devoted to their art who were content to accept the alternatives of a fee of from two to ten silver shekels when an operation was successful or amputation of both their hands when it failed. The following version is taken from the translation by Mr. Johns. The German rendering given in the *Deutsche Medicinishe Wochenschrift* differs from it in a few quite unimportant particulars. For instance, in the German the words "gentleman" and "bronze" are not represented and the word which Mr. Johns has translated "sheep" appears as "ass" (Esel).

§ 215. If a doctor has treated a gentleman for a severe wound with a bronze lancet and has cured the man, or has opened an abscess of the eye for a gentleman with the bronze lancet and has cured the eye of the gentleman, he shall take ten shekels of silver.

§ 216. If he (the patient) be the son of a poor man, he shall take five shekels of silver.

§ 217. If he be a gentleman's servant, the master of the servant shall give two shekels of silver to the doctor.

§ 218. If the doctor has treated a gentleman for a severe wound with a lancet of bronze and has caused the gentleman to die, or has opened an abscess of the eye for a gentleman with the bronze lancet and has caused the loss of the gentleman's eye, one shall cut off his hands.

§ 219. If a doctor has treated the severe wound of a slave of a poor man with a bronze lancet and has caused his death he shall render slave for slave.

§ 220. If he has opened his abscess with a bronze lancet and has made him lose his eye, he shall pay money, half his price.

§ 221. If a doctor has cured the shattered limb of a gentleman, or has cured the diseased bowel, the patient shall give five shekels of silver to the doctor.

§ 222. If it is the son of a poor man, he shall give three shekels of silver.

§ 223. If a gentleman's servant, the master of the slave shall give two shekels of silver to the doctor.

§ 224. If a cow doctor or a sheep doctor has treated a cow or a sheep for a severe wound and cured it, the owner of the cow or sheep shall give one-sixth of a shekel of silver to the docto as his fee.

§ 225. If he has treated a cow or a sheep for a severe wound and has caused it to die, he shall give a quarter of its price to the owner of the ox or sheep.

ANGIO-NEUROTIC ERYTHEMA AND ITS SURGICAL TREATMENT BY NEURECTOMY.

IN the May number of the *Bulletin of the Johns Hopkins Hospital* Dr. Joseph C. Bloodgood has published an account of three cases of angio-neurotic disease, in one of which the condition was multiple and was relieved by division of the nerves over the distribution of which the area of erythema and œdema extended. The patient was a female, white, and 17 years of age. She came under Dr. Bloodgood's observation in July, 1900. Her illness began about eight months before that date with signs of an abscess at the root of the right upper bicuspid tooth. There were persistent pain and tenderness referred to the right gum and cheek, and after about six

months she began to suffer from peculiar attacks of syncope, which were said to occur sometimes two or three times a day with free intervals of two or three days. When Dr. Bloodgood saw her there was no swelling or œdema of the gum or cheek, but tenderness was complained of when the antrum cavities were palpated and there was almost constant pain referred to both cheeks. Careful inspection of the nasal and pharyngeal cavities demonstrated no pathological condition. Examination of the blood showed 5,000,000 red cells and 12,000 leucocytes per cubic millimetre, with 85 per cent. of hæmoglobin. The abdomen, heart, and lungs were apparently normal. She was kept under observation for a week during which time she was occasionally quite hysterical, but there were no fainting attacks. On July 21st, 1900, ether was administered and the antrum cavities on both sides were opened through an incision above the root of the bicuspid tooth. The size of the opening was about five by eight millimetres. On opening the left antrum there was very little hæmorrhage. The cavity seemed to be smaller than normal, the pathological condition being probably one of intense œdema and hyperæmia of the mucous membrane. On opening the right antrum there was no purulent collection, but the hæmorrhage was so profuse from this opening and from the right anterior and posterior nares, that it became necessary to pack the cavity, to plug the nares, and to desist from further inspection. The convalescence from the operation was very comfortable. The packing of the antrum cavities and nares was entirely removed on the third day. The patient stated that she was perfectly relieved of the pain and tenderness present before the operation. She left the hospital in two weeks apparently completely relieved. During this time there was no discharge of pus from the antrum sinuses.

In January, 1901, the opening into the left antrum had closed and no recurrence of the trouble had developed after some weeks so it was considered justifiable to allow the opening of the right antrum to close. Within a week the patient began to complain of pain in the right side of the cheek; this was associated with almost daily bleeding from the right side of the nose and an area of erythema and œdema appeared in the skin and subcutaneous tissue of the cheek over the right antrum. There was no fever or leucocytosis. This area was present on the right cheek only at this time. This area of erythema and œdema remained in about the same condition from January, 1901, to May, 1902, a period of one year and four months. There were slight changes in colour and the amount of œdema, but the area never at any time entirely disappeared. Now and then the pain and tenderness would entirely disappear. In March, 1901, the sinus into the right antrum was reopened. There was no evidence of infection. The mucous membrane was not as œdematous or congested as at the previous operation and there was very little bleeding. This operation relieved the bleeding from the nose and much of the pain and tenderness and for a short time the red patch on the right cheek was paler in colour. Dr. Bloodgood was now inclined to consider that the original condition in the antrum was not an infection, but a neurosis—i.e., an angio-neurotic œdema of the mucous membrane of the antrum cavity. As the infra-orbital nerve supplied the area involved he felt that its division might relieve the condition and for this reason on May 1st, 1902, the infra-orbital nerve on the right side was exposed and divided. Inspection of the tissues through the usual incision beneath the eyelid demonstrated no pathological change. The bony wall of the antrum was exposed and appeared to be normal. Almost immediately after the division of the nerve the area of erythema and œdema disappeared. As soon as the patient came out of the narcosis she declared that the pain and tenderness were no longer present. Up to the present time (February, 1903), a period of almost a year, there has been no recurrence of the trouble. Ten days after this neurectomy of the right infra-orbital nerve a similar operation was performed on the left infra-orbital nerve for a similar condition. The state of the tissues found on the right side was observed on the left and fortunately the immediate and permanent relief has been the same.

THE SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

To the Editors of THE LANCET.

SIRS,—I should like to know if the Society for the Relief of Widows and Orphans of Medical Men is open to provincial medical men as well as to London practitioners. If not, would it not be possible for a similar society to be formed for the provinces?

I am, Sirs, yours faithfully,

June 1st, 1903. ENQUIRER.

*** As at present constituted membership of the society in question is, we believe, confined to legally qualified men residing within 20 miles of Charing Cross.—ED. L.

FEES OF MEDICAL MEN.

IN Hamilton Sheriff Court an action was recently raised at the instance of Dr. Grant, Blantyre, against the trustees of the late Mr. John Craig of Bellfield. Dr. Grant attended Mr. Craig during his last illness and rendered an account for £36. The trustees refused payment and an action was accordingly raised in which defendants stated that the account was overcharged, the visits being put down at 20s. each. They expressed their willingness to pay 7s. 6d. per visit, being the rate charged by the plaintiff on a former occasion. On behalf of Dr. Grant it was stated that the recent visits were exceptional, occurring mostly in the evening and extending for one hour or two hours. The sheriff remitted the case to Dr. J. C. Renton, whose report was to the effect that in the circumstances he considered the charge to be quite moderate. Sheriff Thomson has accordingly given decree in favour of Dr. Grant for the full amount claimed, with £4 19s. for expenses and a fee of £3 3s. to Dr. Renton.

GONORRHŒAL MASTITIS.

To the Editors of THE LANCET.

SIRS,—In such literature on the subject as I have access to at present I can find no mention of mastitis secondary to gonorrhœa. The following case may therefore be of interest.

A young man who contracted syphilis in December last and who has ever since had a purulent discharge from the urethra came to me last week with an abscess of the left breast which I incised, withdrawing about half an ounce of pus. The pus on microscopical examination was found to contain numerous diplococci which stained readily with methyl violet and which to all appearances were identical with diplococci found, though in much fewer numbers, in the urethral discharge. They in many instances presented the appearance of being in the pus cells and were the only micro-organisms present in either fluid. Unfortunately staining by Gram's method was not tried.

I am, Sirs, yours faithfully,

Mountain Ash, June 1st, 1903. H. FREETH, M.D. Dub.

COMMUNICATIONS not noticed in our present issue will receive attention in our next.

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY (8th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (2 P.M.), St. Mary's (2.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (9.30 A.M.), Royal Free (2 P.M.), Guy's (1.30 P.M.).

TUESDAY (9th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.), Metropolitan (2.30 P.M.) London Throat (9.30 A.M.), Royal Ear (3 P.M.), Samaritan (9.30 A.M. and 2.30 P.M.), Throat Golden-square (9.30 A.M.), Soho-square (2 P.M.).

WEDNESDAY (10th).—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing Cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), St. George's (Ophthalmic, 1 P.M.), St. Mary's (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (9.30 A.M. and 2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.), Westminster (2 P.M.) Metropolitan (2.30 P.M.), London Throat (9.30 A.M.), Cancer (2 P.M.), Throat, Golden-square (9.30 A.M.), Guy's (1.30 P.M).

THURSDAY (11th).—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing Cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (1.30 P.M.), St. Mary's (2.30 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.), Metropolitan (2.30 P.M.), London Throat, (9.30 A.M.), St. Mark's (2 P.M.), Samaritan (9.30 A.M. and 2.30 P.M.), Throat, Golden-square (9.30 A.M.), Guy's (1.30 P.M.).

FRIDAY (12th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Charing Cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), St. Mary's (2 P.M.), Ophthalmic (10 A.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (9.30 A.M.), Samaritan (9.30 A.M. and 2.30 P.M.), Throat, Golden-square (9.30 A.M.), City Orthopædic (2.30 P.M.), Soho-square (2 P.M.).

SATURDAY (13th).—Royal Free (9 A.M.),London (2 P.M.), Middlesex, (1.30 P.M.), St. Thomas's (2 P.M.), University College (9.15 A.M.), Charing Cross (2 P.M.), St. George's (1 P.M.), St. Mary's (10 P.M.), Throat, Golden-square (9.30 A.M.), Guy's (1.30 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

SOCIETIES.

TUESDAY (9th).—ROYAL MEDICAL AND CHIRURGICAL SOCIETY (20, Hanover-square, W.).—8.30 P.M. Paper:—Dr. W. A. Turner: A Statistical Enquiry into the Prognosis and Curability of Epilepsy based upon the Results of Treatment.

MEDICO-LEGAL SOCIETY (20, Hanover-sqnare, W.).—8.30 P.M. Adjourned Discussion on Dr. J. G. Garson's paper on the Position

of Medical Jurisprudence in London, especially in Reference to the Investigation of Cases of Death from Violence. Paper:—Dr. W. Westcott: Overlaying in Infants. Discussion on the Workman's Compensation Act (opened by Dr. F. Smith). Mr. R. H. Wellington: Notes on the Recent Southwark Poisoning Case.

WEDNESDAY (10th).—DERMATOLOGICAL SOCIETY OF LONDON (11, Chandos-street, Cavendish-square, W.).—5.15 P.M. Demonstration of Cases of Interest.

THURSDAY (11th).—BRITISH GYNÆCOLOGICAL SOCIETY (20, Hanover-square, W.).—8 P.M. Adjourned Discussion on Dr. C. H. R. Routh's paper on Some Directions and Avenues through which probably a more Successful Treatment of Cancer may Result and perhaps Cure. Paper:—Dr. M. Moullin: On the Treatment of Hæmatocolpos and Hæmatometra.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM (11, Chandos-street, Cavendish-square, W.).—8 P.M. Card Specimens will be shown. 8.30 P.M. Papers:—Major H. Herbert, I.M.S.: Glaucoma.—Mr. N. B. Harman: Masticatory Winking-movements.—Dr. L. Werner: A Case of Intraocular Echinococcus Cyst with Brood-capsules.—Dr. G. M. Scott: Retinitis Proliferans and Detachment of the Retina.—Mr. H. W. Dodd: A Case of Melano-sarcoma of the Upper Lid.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

MONDAY (8th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Dr. J. Galloway: Clinique. (Skin.) 5.15 P.M. Dr. E. Cautley: Diarrhœa in Infants.

POST-GRADUATE COLLEGE (West London Hospital, Hammersmith-road, W.).—5 P.M. Dr. Saunders: Examination of the Stomach and Gastric Contents.

TUESDAY (9th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Dr. H. Campbell: Clinique. (Medical.) 5.15 P.M. Dr. G. L. Cheatle: The Relation of Carcinoma to Nerve and Trophic Areas.

POST-GRADUATE COLLEGE (West London Hospital, Hammersmith-road, W.).—5 P.M. Mr. Bidwell: Operations performed on the Stomach, including Intestinal Anastomosis.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Queen-square, Bloomsbury).—3.30 P.M. Dr. Buzzard: Charcot's Joint Disease.

WEDNESDAY (10th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Mr. H. Marsh: Clinique. (Surgical.) 5.15 P.M. Mr. T. Collins: Ophthalmia.

POST-GRADUATE COLLEGE (West London Hospital, Hammersmith-road, W.).—4 P.M. Dr. R. H. Cole: Demonstration of Clinical Cases at Hanwell Asylum. (At Hanwell.)

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST (Brompton).—3 P.M. Dr. Wethered: Asthma.

THURSDAY (11th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Mr. Hutchinson: Clinique. (Surgical.) 5.15 P.M. Dr. C. T. Williams: The Etiology and Treatment of Hæmoptysis.

POST-GRADUATE COLLEGE (West London Hospital, Hammersmith-road, W.).—5 P.M. Mr. Keetley: Some Common Diseases and Injuries of the Knee.

MOUNT VERNON HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST (7, Fitzroy-square, W.).—4 P.M. Dr. G. F. Johnston: Hæmoptysis. (Post-Graduate Course.)

CHARING CROSS HOSPITAL.—4 P.M. Mr. Waterhouse: Surgical Cases. (Post-Graduate Course.)

THE HOSPITAL FOR SICK CHILDREN (Gt. Ormond-street, W.C.).—4 P.M. Mr. Kellock: Inguinal Hernia.

GUY'S HOSPITAL MEDICAL SCHOOL—UNIVERSITY OF LONDON (Physiological Theatre).—4 P.M. Dr. E. W. Ainley Walker: Modern Views upon the Causation of Cancer. (Gordon Lecture.)

FRIDAY (12th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Dr. H. Tilley: Clinique. (Throat.) 5.15 P.M. Mr. M. Robson: The Surgical Treatment of Gastric Ulcer.

POST-GRADUATE COLLEGE (West London Hospital, Hammersmith-road, W.).—5 P.M. Dr. R. J. Reece: Food Poisoning.

EDITORIAL NOTICES.

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It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this office.

Lectures, original articles, and reports should be written on one side of the paper only, AND WHEN ACCOMPANIED BY BLOCKS IT IS REQUESTED THAT THE NAME OF THE AUTHOR, AND IF POSSIBLE OF THE ARTICLE, SHOULD BE WRITTEN ON THE BLOCKS TO FACILITATE IDENTIFICATION.

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We cannot prescribe or recommend practitioners.

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METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, June 4th, 1903.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Rainfall.	Solar Radiation in Vacuo.	Maximum Temp. Shade.	Min. Temp.	Wet Bulb.	Dry Bulb.	Remarks at 8.30 A.M.
May 29	29·78	E.	0·05	122	71	54	56	57	Cloudy
,, 30	29·73	N.W.	0·02	130	79	57	61	66	Hazy
,, 31	29·75	N.E.	0·03	109	77	57	56	60	Fine
June 1	29·76	E.	0·07	129	82	52	57	61	Fine
,, 2	29·97	N.E.	...	105	63	54	52	56	Cloudy
,, 3	30·25	N.E.	...	92	56	46	47	51	Cloudy
,, 4	30·37	N.E.	...	116	65	44	49	54	Cloudy

During the week marked copies of the following newspapers have been received: *Scarborough Evening News, West Cumberland Times, Daily Mail, Carlisle Patriot, Carlisle Journal, Dublin Evening Mail, Sussex Daily News, Birmingham Post, Aberdeen Free Press (Weekly), Brighton Gazette, Surrey Advertiser, Bristol Mercury, Dublin Express, Morning Post, Daily Graphic, Sanitary Record, Local Government Chronicle, Mining Journal, Hertfordshire Mercury, Burton Chronicle,* &c.

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